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EDITORIAL NOTE

As this volume of the Yorkshire Archaeological Journal came close to completion Jill Wilson, the Yorkshire Archaeological Society's Honorary Archaeological Editor from volume 76 (2004) onwards, decided to resign from that position. Over the last six years she has been responsible not only for editing its archaeological content but has also, most generously, undertaken freely the paging and layout of the Journal. The Society is extremely grateful to her for all her hard work in this and other areas of our publications programme.

The paging and layout of this volume has been undertaken by Lesley Collett at York Archaeological Trust.

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Richard M. Koch read History both as an undergraduate and graduate at Leeds University. Under John Taylor and Wendy Childs he studied medieval chronicles and literary sources, the reign of Richard II and also the political and posthumous career of Thomas of Lancaster. He then obtained his PhD at the University of Connecticut, Storrs, with a thesis on the life and work of William Stubbs as historian and clergyman. He is currently working on a study of the personal and historical friendship between William Stubbs, J. R. Green and E. A. Freeman. Mr. Koch now lives in Hartford, Connecticut, USA, teaching History at Hillyer College, University of Hartford, and at Quinnipiac University, Hamden, Connecticut.

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PALAEOENVIRONMENTAL EVIDENCE FROM DEPOSITS AT BEDALE, NORTH YORKSHIRE

By Benjamin Gearey and Enid Allison
with John Carrott, Allan Hall, Jennifer Proctor
and Alexandra Schmidl

INTRODUCTION

A phased programme of archaeological investigations was undertaken by Pre-Construct Archaeology Limited in advance of development of land to the rear of 26 Market Place, Bedale, North Yorkshire (Fig. 1). The central National Grid Reference of the site is SE 265 881. The archaeological project was commissioned by CgMs Consulting, on behalf of McCarthy and Stone (Developments) Limited, and monitored by the Heritage Unit of North Yorkshire County Council, on behalf of the Local Planning Authority, Hambleton District Council. A preliminary archaeological evaluation, undertaken in spring 2002, revealed the presence of a prehistoric wetland area. This comprised substantial organic silt sediments representing deposition within a body of water, such as a lake or palaeochannel, overlain by an extensive peat formation. Radiocarbon dating of the peat placed accumulation of the material in the Mesolithic period. Archaeological remains of medieval and post-medieval date were also recorded in the evaluation trenches. A more extensive open area excavation was undertaken, in the autumn of 2003, in order

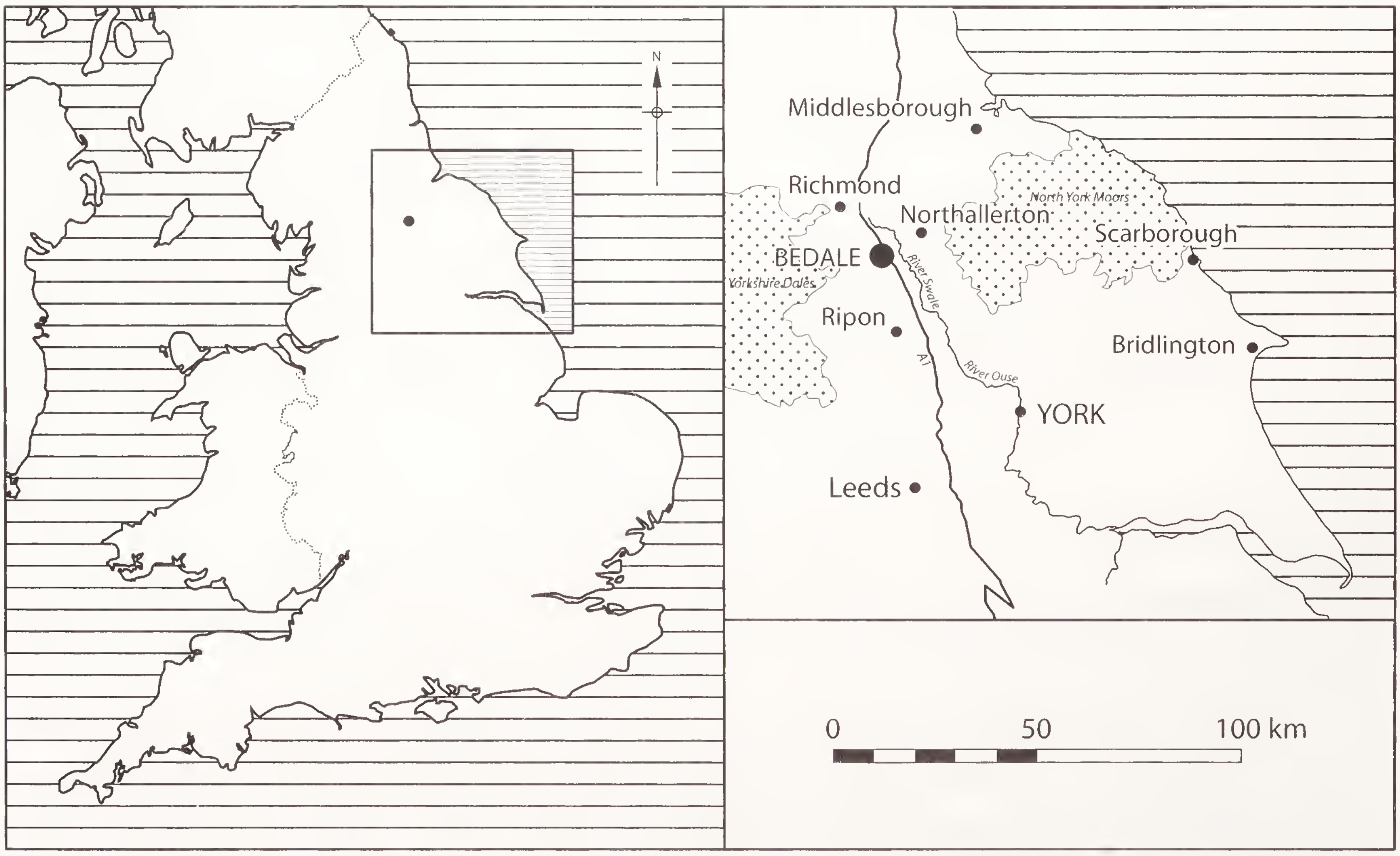

Fig. 1: Site Location

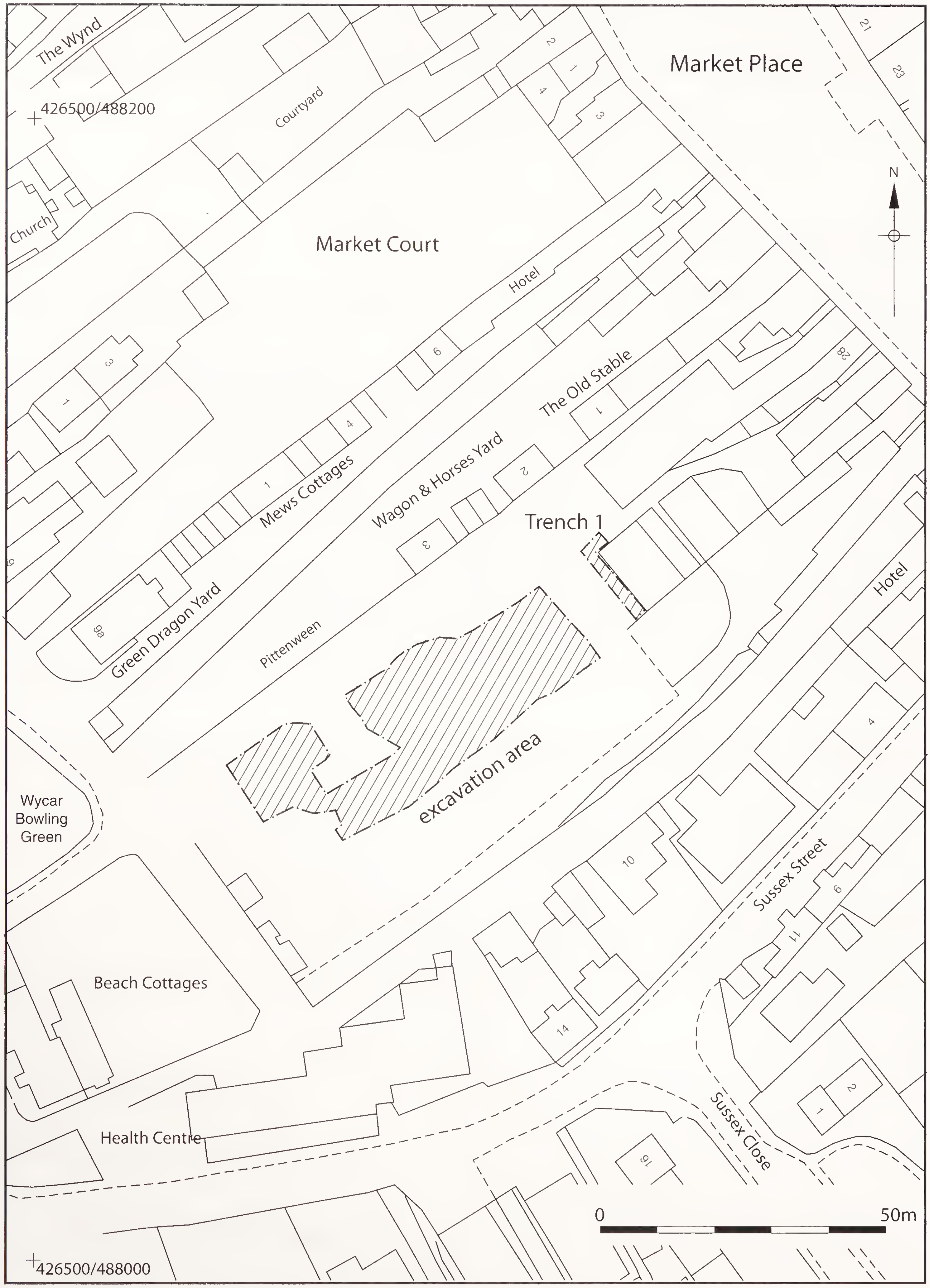

Fig. 2: Areas of investigation

to further investigate the ancient wetland and overlying medieval deposits. The excavation focussed on the footprint of the main building in the development and comprised an irregular, but roughly rectangular, trench with maximum dimensions 64m NE-SW x 22m NW-SE, covering c. 1,100 square metres (Fig. 2). A paper describing the medieval and post-medieval archaeological remains (Proctor *et al.* 2008) also contains full details of the site location and description, historical background and archaeological methodologies employed, but relevant information is summarised here. Full details of the earlier assessment and subsequent works are presented in Carrott *et al.* (2004) and Gearey *et al.* (2006), respectively.

Overburden was removed by machine under archaeological supervision across the excavation area and a NE-SW aligned sondage was excavated by machine along the south-western limit of excavation. The purpose of this sondage was to examine, in section, the prehistoric wetland deposits. Other sondages were hand-excavated through the wetland deposits (Fig. 3): towards the south-western end of the excavation area (Sections 1 and 2), centrally (Section 18) and adjacent to the north-eastern limit of excavation (Section 17). Four column samples, comprising two parallel columns in each section, were taken through the wetland deposits in Section 17 (Samples 1 and 2) and Section 18 (Samples 3 and 4). Preliminary analysis of pollen and plant and invertebrate macrofossils, along with targeted radiocarbon dating of organic material, confirmed the findings of the original archaeological evaluation, in that the organic silts and peats represented an area of ancient wetland of early Holocene origin, in archaeological terms, derived from the Mesolithic period. Significant at a regional level, these deposits had potential to add considerably to current understanding of early Holocene landscape and climate changes in the area. Accordingly, Sample 3 was selected for further detailed analysis leading to full publication of the results, as detailed in this paper. The sequence of deposits in Section 18 comprised approximately 1.50m of muds/organic silts (the lower half of the sequence) and detritus peat layers (the upper half) which were sampled via two parallel series of four overlapping 0.50m column tins (Column Samples 3 and 4, Tins A to D; see Fig. 7). The deposits (as seen in Column Sample 3) were recorded following the sediment classification system of Troels-Smith (1955), together with a brief written description (Table 1).

NATURAL DEPOSITS

Glacial sand and gravel was exposed at the south-western end of the excavation area at a maximum height of 40.10m OD, sloping away gently to the south (Fig. 3). To the north-east, in evaluation Trench 1, glacial sand and gravel overlain by boulder clay was exposed in the northern portion of the trench at a maximum height of 41.12m OD. Encountered across the excavation area were thick deposits of laminated organic silts representing water deposited sediments. It was not possible to determine within the excavated area whether this material was deposited within a palaeochannel or a discrete body of water, such as a lake or pond. Sections 1 and 2 excavated through the deposits revealed the gently sloping profile of the feature

Position in column	Context	Sample no.	Troels-Smith	Transition	Description	Notes
Tin A: 18.0 to 50.0 cm (depth ~0.07 to 0.39 m)	67	311	Dl2Dh/Dg2	grades to…	Dark brown, crumbly, woody detritus peat	
Tin A: 0.0 to 18.0 cm Tin B: 32.0 to 50.0 cm (depth ~0.39 to 0.57 m)	71	310	Dh/Dh3Ld1	grades to…	Dark brown, somewhat crumbly, detritus peat	
Tin B: 20.0 to 32.0 cm (depth ~0.57 to 0.69 m)	171	309	Ld3Dg/Dh1	grades to…	Dark brown, rather crumbly, mix of mud and fine detritus peat	
Tin B: 8.0 to 20.0 cm (depth ~0.69 to 0.81 m)	172	308	Ld3Dg/Dh1	grades to…	Dark brown mud with fine detritus peat	softer and less crumbly than Sample 309
Tin B: 0.0 to 8.0 cm Tin C: 38.0 to 48.0 cm (depth ~0.81 to 0.89 m)	173	307	Ld4?Dg+	grades to…	Mid to dark brown (somewhat 'banded'), mix of mud and fine detritus peat	
Tin C: 36.0 to 38.0 cm (depth ~0.89 to 0.91 m)	174	306	Dh4	grades to…	Mid to dark brown, 'moss-rich' detritus	mostly matted moss
Tin C: (34.0-36.0) to 36.0 cm (depth ~0.91 to 0.93 m)	175	305	Ld3Dg1	sharp boundary to…	Dark brown, soft mud, with a little herbaceous detritus	
Tin C: 12.0 to (34.0-36.0) cm (depth ~0.93 to 1.15 m)	176	304	Ld4test mol.+	grades to…	as 303 but locally paler brown	
Tin C: 0.0 to 12.0 cm Tin D: 27.0 to 50.0 cm (depth ~1.15 to 1.38 m)	176	303	Ld4test mol.+		Dark grey-brown, soft (working more or less plastic), mud, with some fine laminations/partings. Snails were present	some fine laminations / partings
Tin D: 9.0 to 27.0 cm (depth ~1.38 to 1.56 m)	176	302	Ld4test mol.+	grades to…	Mid grey-brown, soft (working more or less plastic), mud. Snails present	lighter shade of grey-brown
Tin D: 0.0 to 9.0 cm (depth ~1.56 to 1.65 m)	176	301	Ld4test mol.+		Mid yellowish-brown (oxidising mid to dark grey-brown), soft (working more or less plastic), mud, with moderate numbers of snails present	yellow-brown in colour

Table 1: Summary of the column sample descriptions for Section 18. The deposits are listed in stratigraphic sequence from top to bottom with their positions within the individual monoliths recorded from the base of each tin. Where the overlapping of the monoliths has resulted in the same deposit being present in two tins the positions within each are given. The 'Troels-Smith' column gives descriptions following Troels-Smith (1955).

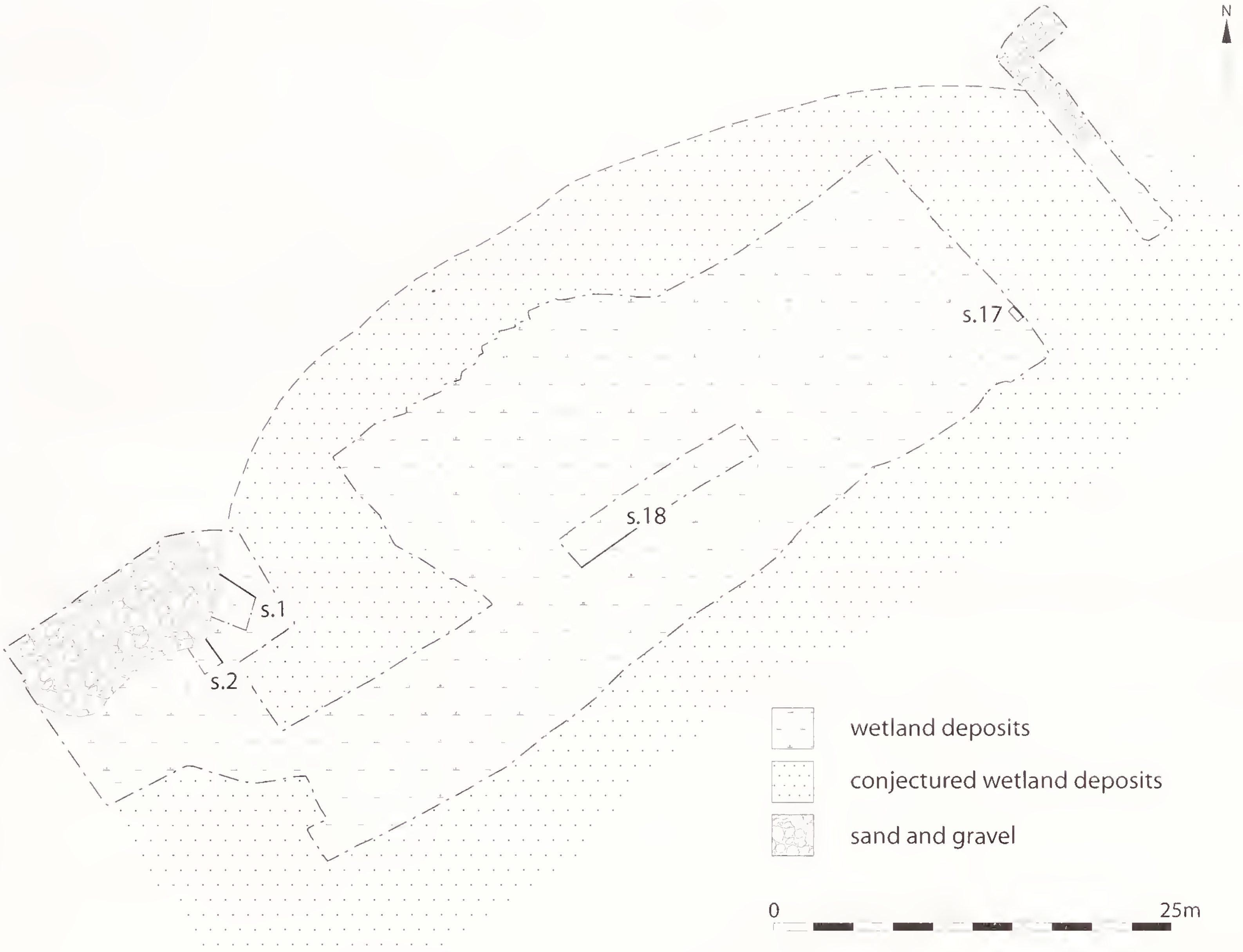

Fig. 3: Wetland deposits

(Figs. 4 and 5). Section 1 recorded a basal height at 39.14m OD, comparable to the 39.08m OD recorded on sand and gravel at the base of the body of water, to the east in Section 17 (Fig. 6). The organic silts largely comprised layers of fine silt and sand, with occasional clay bands, varying in colour from very light brown through to dark brown, with occasional blue and green hues. The thickest full sequence was in Section 17, where a total of 0.70m of material was exposed, this lying close to the edge of the body of water. In the central part of the excavation area, the full thickness of deposits could not be exposed due to health and safety considerations. The edge of the feature was also recorded to the north-east of the excavation area, in evaluation Trench 1, indicating that the body of water extended across an area measuring at least 75m NE-SW by 25m NW-SE.

Peat layers overlay the organic silts across the excavation area and were also recorded to the north-east, in evaluation Trench 1. The maximum recorded thickness of the peat formation was c. 1.0m, in Section 18 in the central part of the excavation area (Fig. 7), with the material thinning out towards the edges of the wetland area (Figs. 4 and 5). The highest level recorded for peat at the site was 40.14m OD, in evaluation Trench 1, on the north-eastern margins of the wetland.

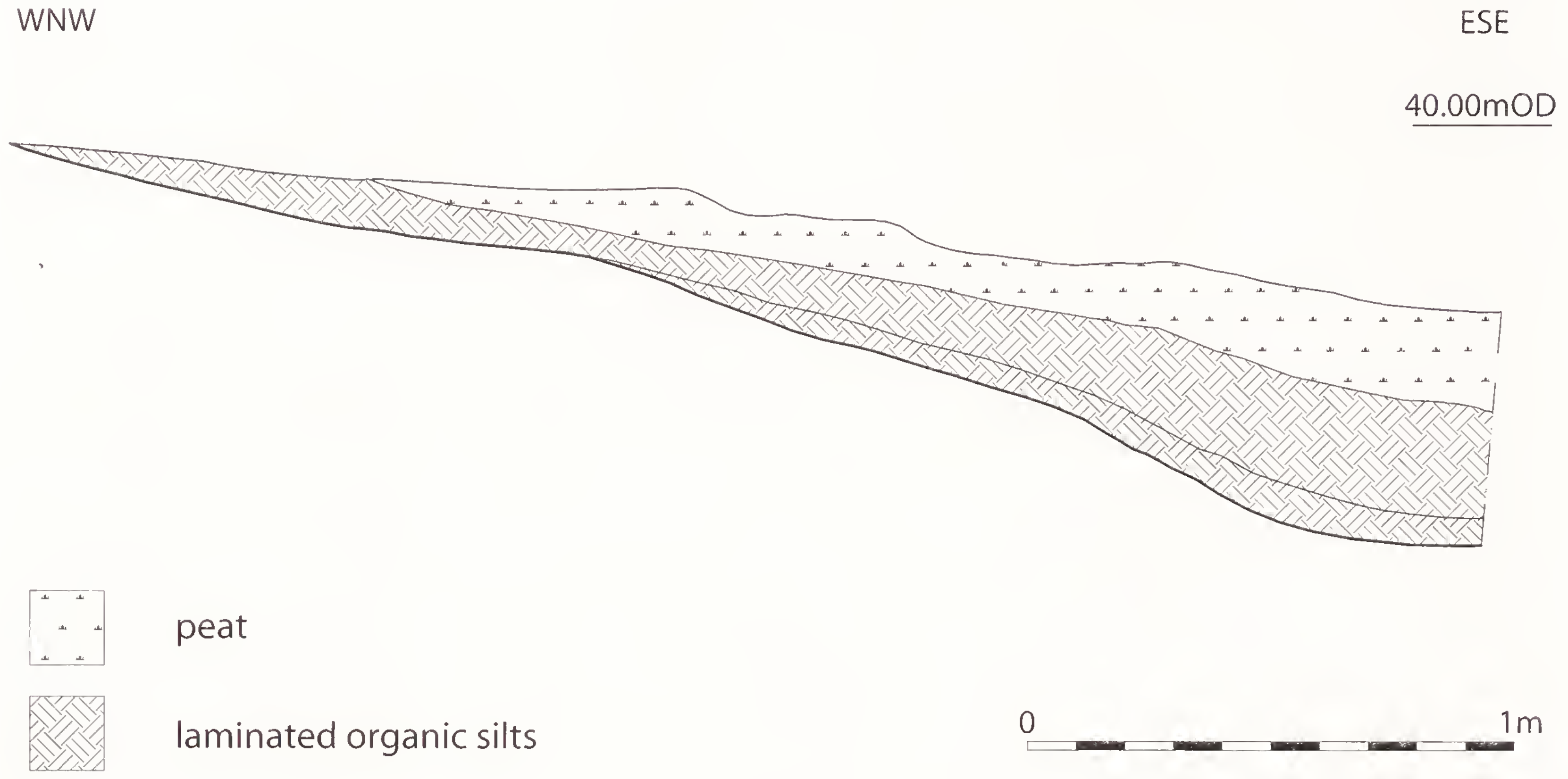

Fig. 4: Section 1 through wetland deposits

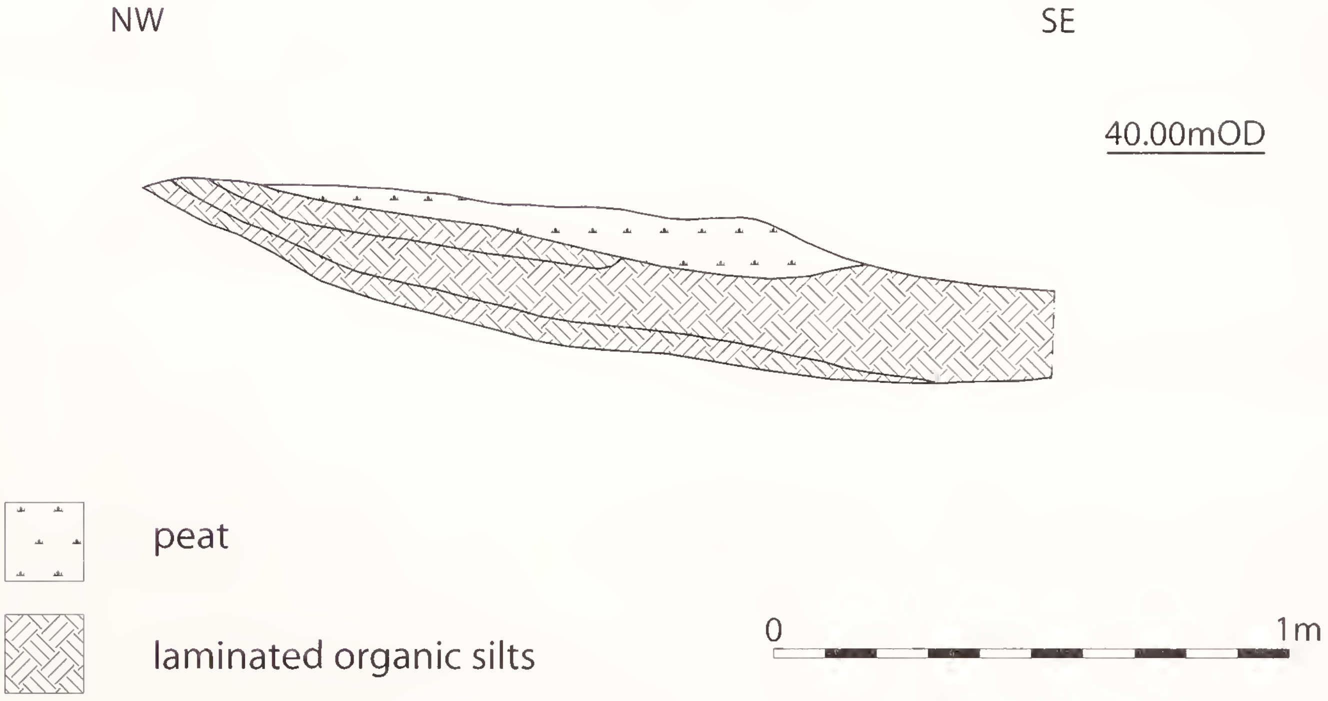

Fig. 5: Section 2 through wetland deposits

METHODS

Radiocarbon dates

A total of seven radiocarbon dates were obtained to establish a chronology for the sequence of deposits, - six at the assessment stage and one additional date during analysis (from ~90 g of organic sediment taken from the top of the laminated silts/muds, Context 175, in Column Sample 4). The selection of dating points was made to reflect clear or suspected changes in the nature of the deposits (e.g. following major context divisions). For four of the deposits radiocarbon dated for the assessment, plant macrofossils (for dating via accelerator mass spectrometry – AMS) were recovered from the processed subsamples prior to the application of paraffin flotation. Two of the subsamples extracted from Column Sample 3 (from Contexts 71 and 172) were not processed for assessment as they appeared of very similar composition to those above, and above and below, respectively, in the sequence. For these, 50mm 'spits' of raw sediment (from 10 to 60mm from the lowest point of each deposit) were sent for dating. After pre-treatment, Context 172 gave 1.6g of organic remains which were dated by AMS. Context 71 gave rather more organic material (7.4g) and radiometric dating with extended counting was employed. All of the radiocarbon dating was undertaken by Beta Analytic Inc. (Miami, Florida, USA).

Diatoms

The lower mud/organic silt deposits were initially assessed for the presence of diatoms (subsamples at 1.02m, 1.22m, 1.29m and 1.49m, all within Context 176; preparations following Batterbee *et al.* 2001), but none were detected and no further analysis was undertaken.

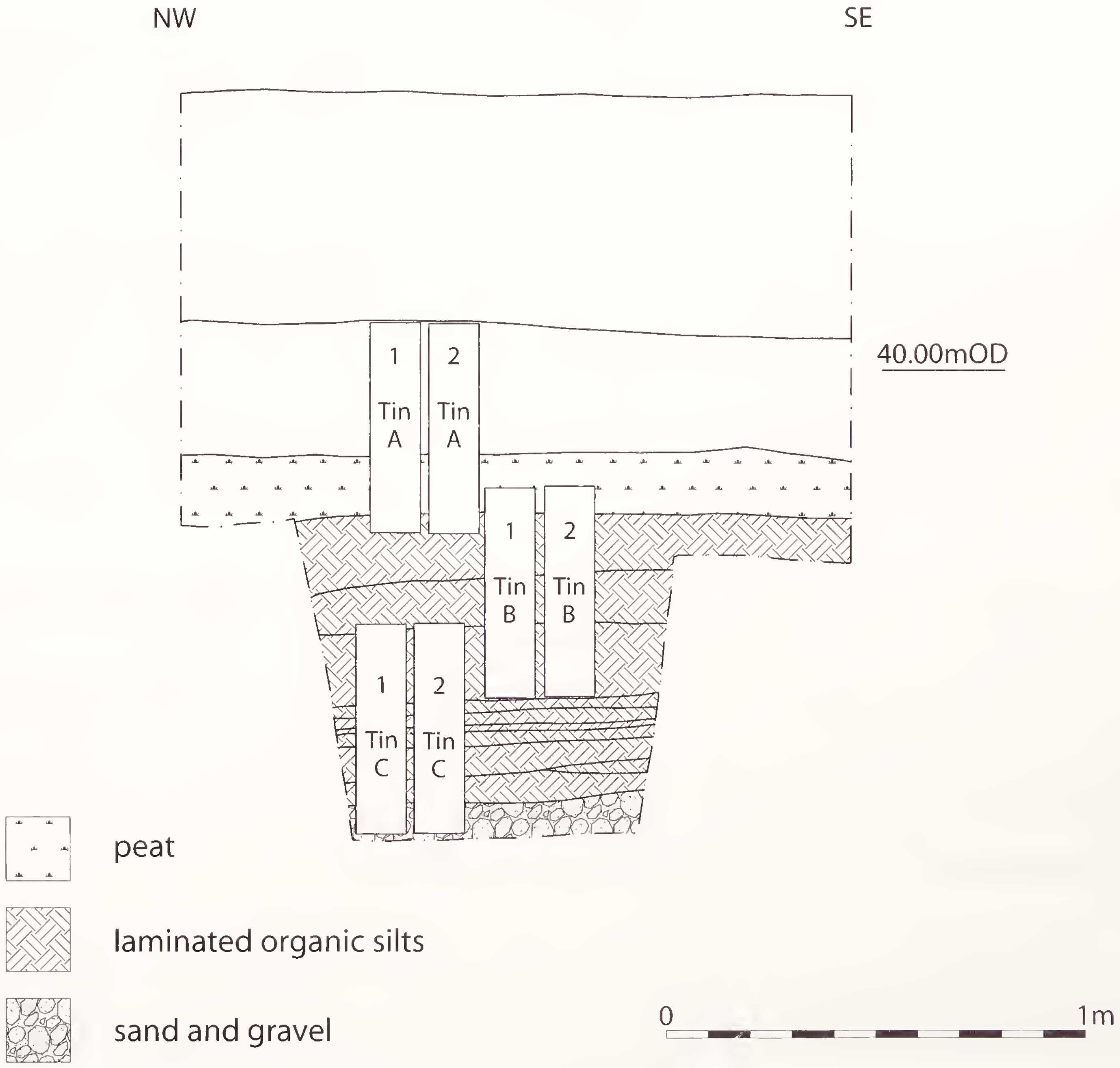

Fig. 6: Section 17 through wetland deposit

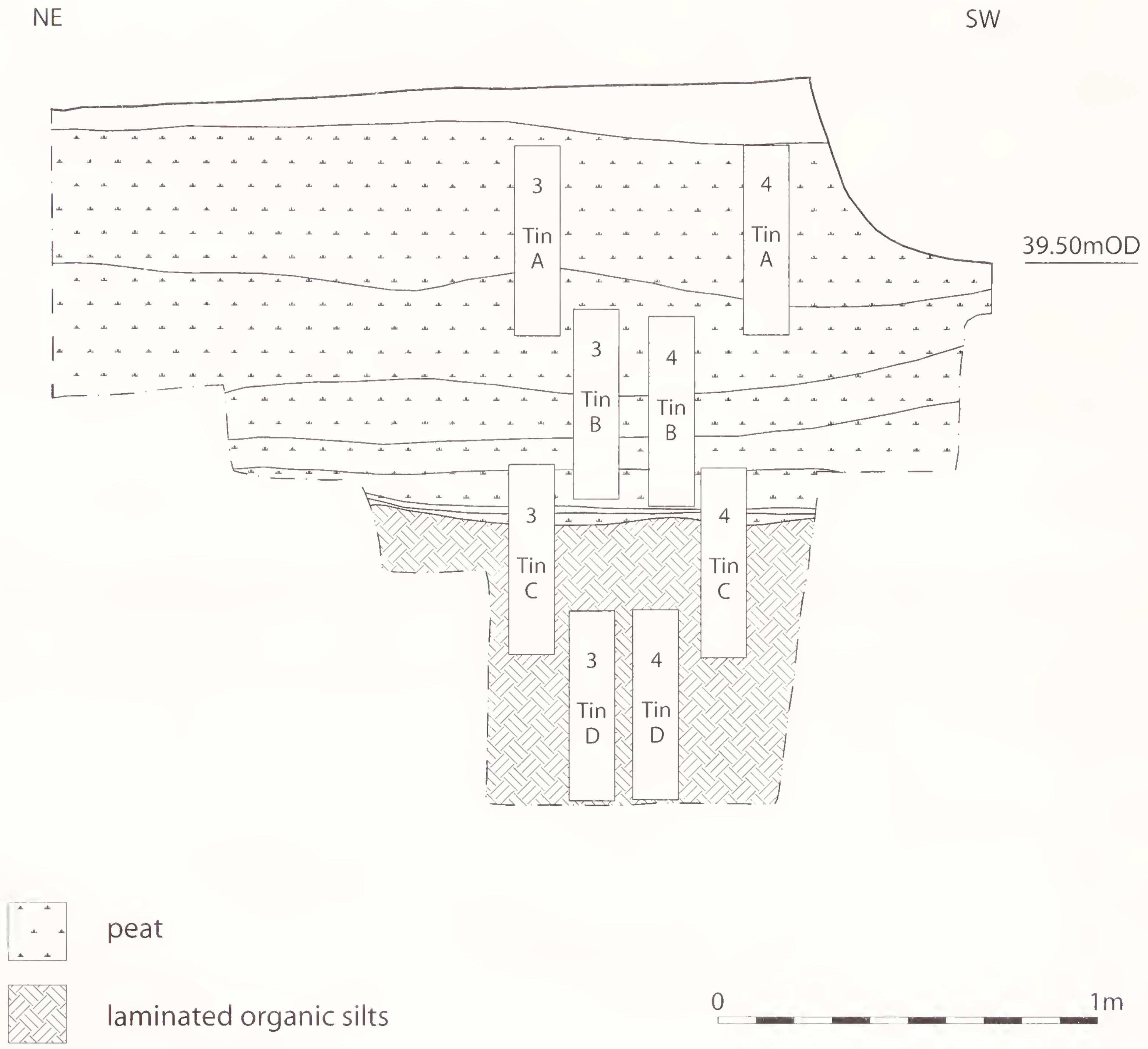

Fig. 7: Section 18 through wetland deposits

Pollen

For the assessment, a total of 15 pollen subsamples were taken from Section 18 (Column Sample 4). Ten of these were from the peat layer (Contexts 71, 171, 172, 173) at 0.08m intervals and five from the laminated organic silts/muds (Contexts 175 and 176) at 0.16m intervals. For the final analysis, further subsamples for pollen were extracted to reduce the previous sampling intervals to 0.04m and 0.08m, respectively. A closer sampling interval was used for the upper half of the sequence as the assessment had indicated that there were more fluctuations in the spectra here.

Pollen preparation followed standard procedures including HF treatment and acetylation (Moore *et al.* 1991). At least 300 total land pollen grains (TLP) excluding aquatics and spores were counted for each sample where possible. However, pollen concentrations were found to be too low for reliable counts at the following points: 0.17m, 0.21m, 0.41m, 0.45m, 0.49m, 0.85m and 0.89m. These data are not plotted on the pollen diagram (Fig. 8). Pollen nomenclature follows Moore *et al.* (1991), with the modifications suggested by Bennett *et al.* (1994). The pollen sum is based on percentage of TLP excluding obligate aquatics and spores. Percentages for these excluded groups are calculated as percentage of the basic sum plus sum of the relevant group.

Plant and invertebrate macrofossils

The other column sample from Section 18 (Column Sample 3) was divided into subsamples according to the excavators' allocated contexts and, for Context 176, where minor variations were observed. This resulted in eleven subsamples, of varying size, which were processed following the procedures of Kenward *et al.* (1980; 1986), for the recovery of plant and invertebrate macrofossils (with the exception of some of the sediment from Contexts 71 and 172 used for radiocarbon dating, see above).

Plant remains in the processed subsample fractions (residues and flots) were identified using a low-power binocular microscope. The remains were recorded semi-quantitatively on a three-point scale of abundance: + = present, i.e. one or relatively few remains or less than 10% by volume; ++ = common, or about 10-50% by volume; +++ = abundant, or more than 50% by volume. Nomenclature for plant taxa follows Stace (1997).

Beetle and bug remains were removed on to moist filter paper for identification using a low-power binocular microscope. Numbers of individuals and taxa of beetles (Coleoptera) and bugs (Hemiptera) were recorded. Other invertebrate taxa were noted if present, and their abundance recorded on a semi-quantitative three-point scale (as for the plant remains, see previous paragraph). Nomenclature for beetles and bugs follows Kloet and Hincks (1964-77) and snails follow Kerney (1999).

RESULTS AND DISCUSSION

Radiocarbon dates

The radiocarbon dates gave a 2-sigma calibrated (95% probability) timeframe for the deposits ranging from Cal BP 9920-9600 to Cal BP 8180-8000, with the earliest peat layers being dated to Cal BP 9000-8620. The individual results from radiocarbon dating of the selected deposits are detailed in Table 2. Interestingly, three of the dates returned, those from Contexts 171, 172 and 173, were effectively the same but represent around 0.25m of deposit, suggesting a rapid development of the peat at this time or mixing of the deposits; visual description of these deposits did reveal them all to contain both mud and detritus peat (Table 1), perhaps favouring the latter.

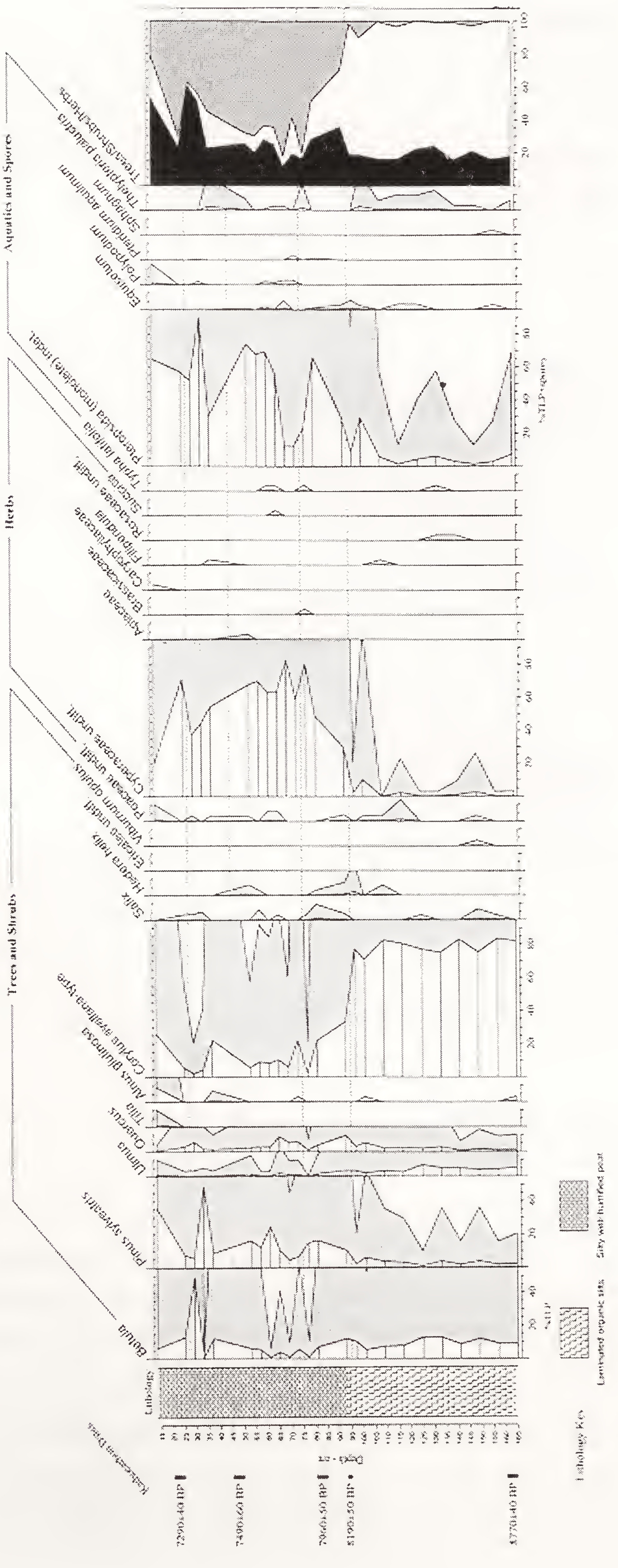

Fig. 8: Pollen diagram

Dates quoted in the following text refer to the 2-sigma calibrated radiocarbon age obtained, unless stated otherwise.

Diatoms

Although no identifiable diatoms were detected, the presence of copulae (girdle bands connecting the diatom frustules) in some of the assessment subsamples indicated that diatoms had once been present. The absence of identifiable remains may be a result of the acid environment causing dissolution of the silica based frustules.

Pollen

The pollen diagram for deposits in Section 18 (Fig. 8) reflects a sequence of early Holocene vegetation changes on and around a shallow body of water which infilled through natural processes of hydroseral succession. The diagram has been divided into five Local Pollen Assemblage Zones (LPAZ) prefixed 'BED' and based on changes in the biostratigraphy; the main features of these zones are given in Table 3.

The radiocarbon dates indicated that sediment accumulation began at Cal BP 9920-9600 (Beta-187370). The basal zone, BED-1 corresponds to the laminated organic silts/muds and reflects sediment accumulation within a body of water such as a pond/lake or perhaps slowly flowing water within a palaeochannel. High percentages of *Corylus avellana*-type pollen indicate a hazel (*Corylus*) dominated wood/ scrub land around the sampling site. Other trees and shrubs were recorded at lower percentages but it seems likely that birch (*Betula*) formed a secondary component of the local vegetation, with elm (*Ulmus*) also growing as a subordinate tree on better-drained soils in the wider landscape. Scots pine (*Pinus sylvestris* L.) was not present to any great extent and, perhaps more surprisingly, neither apparently was oak (*Quercus*, see below).

Little herbaceous pollen was recorded, suggesting a dense canopy with a depauperate understorey. The occasional grains that were observed included *Filipendula* (meadowsweet), *Caryophyllaceae* (pink family), *Apiaceae* (carrot family) and *Succisa pratensis Moench* (devil's bit scabious); these taxa probably represent wetland/tall herb vegetation communities on the damper soils at the edge of the basin, and the ferns *Thelypteris palustris* Schott (marsh fern) and *Equisetum* (horsetail ferns) would probably also have grown in this habitat. Only a single grain of *Typha latifolia* L. (reed-mace) indicated aquatic taxa in this zone.

BED-2 opens at a date of Cal BP 9290-9020 (Beta-216398) with a marked expansion of sedges (*Carex*) and ferns (*Pteropsida*), whilst hazel displays a concomitant decline. However, it is unlikely that this represents the actual replacement of hazel by these taxa. The stratigraphic transition from laminated organic silts to peat at

Context	Sample	Location in column sample monoltih	Beta Number	Submitted material	Measured radiocarbon age	13C/12C ratio	Conventional radiocarbon age	Calibration of radiocarbon age to calendar years @ 2-sigma
67	311/T	Tin A: 18.0 to 50.0 cm (depth ~0.23 m)	Beta-187365	Bark fragments, probably birch (Betula): 335 mg	7340 +/- 40 BP	-28.1 o/oo	7290 +/- 40 BP	Cal BC 6230 to 6050 (Cal BP 8180 to 8000)
71	310	Tin A: 1.0 to 6.0 cm (Tin B: 33.0 to 38.0 cm) (depth ~0.50 m)	Beta-187366	Organic sediment: 220 g	7550 +/- 60 BP	-28.8 o/oo	7490 +/- 60 BP	Cal BC 6445 to 6225 (Cal BP 8395 to 8175)
171	309/T	Tin B: 20.0 to 32.0 cm (depth ~0.61 m)	Beta-187367	Small wood and bark fragments: 65 mg	8020 +/- 40 BP	-29.7 o/oo	7940 +/- 40 BP	Cal BC 7040 to 6670 (Cal BP 9000 to 8620)
172	308	Tin B: 9.0 to 14.0 cm (depth ~0.79 m)	Beta-187368	Organic sediment: 115 g	8010 +/- 50 BP	-28.0 o/oo	7960 +/- 50 BP	Cal BC 7055 to 6670 (Cal BP 9005 to 8620)
173	307/T	Tin B: 0.0 to 8.0 cm Tin C: 38.0 to 48.0 cm (depth ~0.85 m)	Beta-187369	Three small fragments of well preserved hazel (Corylus avellana L.) nutshell: 70 mg	7980 +/- 40 BP	-27.7 o/oo	7940 +/- 40 BP	Cal BC 7040 to 6670 (Cal BP 9000 to 8620)
175	305	Tin C: (34.0-36.0) to 36.0 cm (depth ~0.93 m)	Beta-216398	Organic sediment: ~90 g	8250 +/- 50 BP	-28.6 o/oo	8190 +/- 50 BP	Cal BC 7340 to 7070 (Cal BP 9290 to 9020)
176	301/T	Tin D: 0.0 to 9.0 cm (depth ~1.60 m)	Beta-187370	Tree bud-scales, birch female catkin scales, dicotyledonous leaf fragments: 27 mg	8810 +/- 40 BP	-27.2 o/oo	8770 +/- 40 BP	Cal BC 7970 to 7650 (Cal BP 9920 to 9600)

Table 2: The radiocarbon dates from Section 18.

Zone	**Depth-m**	**Main characteristics**
BED-5	0.14-0.27	*Pinus* increases to ~35%, *Corylus* to 25% and *Alnus* to 9%. *Betula* reduced to 5%, *Quercus* to trace (<1%) values and Cyperaceae to 20%.
BED-4	0.27-0.45	An equally sharp peak of 50% in *Betula* follows a pronounced peak of 50% in *Pinus*. *Corylus* increases to ~20% but falls to ~2% by close of zone. Cyperaceae drops steadily to 35%. Pteropsida increases to 90%TLP+spores.
BED-3	0.45-0.75	*Pinus* drops at the opening of the zone before rising to 25% before dropping to 12%, *Quercus* also shows an increase to 10% at the opening of the zone. *Corylus* at ~10%. High Cyperaceae percentages (60%) throughout, whilst Pteropsida rises to 70%.
BED-2	0.75-0.95	*Pinus* increases to around 15%, but other trees including *Quercus*, *Ulmus* and *Betula* all decline and *Corylus* shows a significant fall to ~35%. Cyperaceae rises to 30%.
BED-1	0.95-1.65	Dominated by *Corylus* (70-80%), with other trees including *Betula* (10%), *Ulmus* (5%). *Quercus* (2-3%) and *Pinus* (3-4%) recorded at lower values.

Table 3: Summary of LPAZs for Section 18. All values are TLP unless otherwise stated.

a depth of around 0.90m indicates that the water body in which these sediments were accumulating was infilling as a result of hydroseral succession. Sedges and ferns were probably spreading onto the surface of the peat, and consequently the pollen record becomes strongly biased in favour of these local plants and away from the vegetation growing in the wider landscape. This process also explains the reductions in oak, elm and birch across this zone since these trees would have been present largely on dryland areas further afield. The rise in pine reflects the ability of this tree to expand onto the damper/poorer soils that became available near the sampling site at this time.

The opening of BED-3 was dated to just after Cal BP 9005-8620 (Beta-187368). The pollen record continues to be dominated by local vegetation with sedges and ferns remaining established on the sampling site. There was evidence for some fluctuations in the arboreal populations, with oak showing a small increase at the base of the zone, apparently at the expense of pine. Establishing the precise nature and sequence of changes in the upper section of this zone and the basal part of BED-4 is complicated by the absence of countable concentrations of pollen from 0.57m after a date of Cal BP 8395-8175 (Beta-187366). This may be the result of the mire surface drying out; the marked peaks in pine and then birch following the hiatus in the biostratigraphy in BED-4 indicate that water tables had fallen sufficiently to allow the surface of the peat to be colonised by these trees. Reductions in sedges at this time may also support the inference of a drier local environment.

Owing to the low concentrations of pollen, there was also a hiatus in the pollen record in the final zone BED-5. However, by the close of the diagram, shortly after Cal BP 8180-8000 (Beta-187365), pine (*Pinus*), hazel and alder (*Alnus*) all appear to be expanding. The fall in sedges following a recovery at the opening of the zone again could suggest a drier local environment; pine was probably benefiting directly from this on the peat soils near to the sampling site.

Plant and invertebrate macrofossils

Plant macrofossil remains (Table 4) preserved by anoxic waterlogging were generally well-preserved and usually reasonably abundant, though identifiable macrofossils were often of quite restricted diversity, with the bulk of the remains formed by herbaceous and woody detritus, as might be expected in deposits which were largely detritus peats. Preservation of invertebrate remains (Table 5) was very varied within and between deposits. Some assemblages gave the subjective impression that there may have been general decay, so perhaps the sequence as a whole may be at risk from dewatering. The concentration of invertebrates also varied, from very low to moderately high (extremely high if crustaceans are included), probably reflecting ecological conditions, rate of sediment accumulation and (in the case of the waterlain deposits – samples from Contexts 175 and 176) distance from the shoreline.

Many of the plant and insect remains from the two lowest deposits (Context 176, Samples 301-304 and Context 175, Sample 305, corresponding to LPAZ BED-1) were of aquatic taxa. Most of the plant remains identified were those that float on or grow submerged in fresh water (e.g. muskgrass/stonewort – *Chara/Characeae*, white water-lily – *Nymphaea alba*) or grow in damp to wet terrestrial places (e.g. many, though not all, of the true sedges – *Carex*). A record of the weevil *Tanysphyrus lemnae* provided indirect evidence of the presence of its host plant, duckweed (*Lemna*). The rest of the invertebrate fauna was also predominantly aquatic and indicated a rich environment, with abundant vegetation (e.g. by the snail *Valvata cristata* – Context 176 only). A wide range of beetles and bugs living in pond/lake environments were recorded and beetles found almost exclusively in running water were also well represented. The elmids, five species of which were recorded here (*Esolus parallelepipedus*, *Oulimnius*, *Limnius volkmari*, *Elmis aenea* and *Riolus/Normandia*), have a system of respiration that requires the very well-oxygenated water found in streams and rivers and also, though more rarely, on the stony shores of lakes; the latter is perhaps the case here although they may also indicate that the sampling point was located at an inflow or outflow point of the former pond/lake or that the deposits formed in slowly flowing water within a palaeochannel. In addition to the elmids, there were several other taxa that live in running water, and the water conditions generally would have been clear and unpolluted. A range of swamp dwelling taxa was represented but open areas of water must also have been present to attract insects such as pond skaters (*Gerris*) – all of the records for pond skaters were from the lower parts of the sequence (Contexts 175 and 176). Aphodius dung beetles were also represented in four samples from the two lowest deposits. Members of this genus are typically found in herbivore dung in the open, but some species are also attracted to foul decomposing plant material.

Unfortunately, none of the remains could be identified to species and their presence does not necessarily imply the presence of grazing animals nearby. However, their consistent occurrence in these lowest samples, albeit in small numbers, is of note.

From Context 174 upwards (corresponding with the beginning of BED-2), beetles and bugs that would have exploited moss and litter in a swamp became predominant in the assemblages and, indeed, the thin deposit, Context 174, was largely composed of matted *Drepanocladus* moss. Another moss, *Hypnum* cf. *cupressiforme*, was represented amongst the identifiable plant remains from Context 173. There were shallow, unpolluted well-vegetated pools supporting a substantial aquatic fauna, again including *Tanysphyrus lemnae* (Contexts 174, 172 and 171, but not recorded from Context 173) which implies the presence of duckweed. Apart from moss and duckweed, there were few indications of other vegetation, although some taxa feeding on sedges (Carex) were present and remains of these plants were common in Context 174 and the two immediately overlying deposits (Contexts 173 and 172). There were records of the froghopper *Aphrophora major* from three of the samples (from Contexts 174 and 173, and the next to uppermost Context 71) in the upper part of the sequence, again implying the presence of a specific host plant, bog-myrtle (*Myrica gale* L.), although remains of the plant itself were not identified.

For all of the deposits, the plant remains of terrestrial vegetation were dominated by birch (determined as silver/downy birch – *Betula pendula*/*B. pubescens* where better preserved). Silver birch forms woods on light, mostly acid soils, especially heathland, and usually in drier places than downy birch. In particular, Context 176 (Samples 301-304) gave large quantities of birch female catkin-scales and nuts. The pollen record indicates that hazel dominated the local woodland at this period, with birch as very much a secondary component, but the macrofossil evidence shows the reverse with only a few nut shells confirming the presence of hazel. However, this may simply be a reflection of the greater mobility of the delicate birch structures. Oak (*Quercus*), which was surprisingly poorly represented in the pollen record (see below), was similarly sparsely represented in the botanical macrofossil assemblages by small numbers of buds/bud scales in just two deposits (Contexts 175 and 173). Small numbers of wood-associated invertebrate taxa were also recorded consistently throughout the sequence, but, apart from these, there were few indications of terrestrial habitats other than swamp. Several ground beetle taxa (e.g. *Pterostichus diligens* and *P. nigrita*) were typical inhabitants of moist ground and *Trechus rivularis* was recorded from Context 71 close to the top of the sequence. The latter is found on moist shady peat sites often with a growth of birch, alder and willow (*Salix*), and an underlying vegetation of moss and sedges (Lindroth 1985, 121).

The pollen spectra for the upper third or so of the sequence (LPAZs BED-5, BED-4 and the upper part of BED-3) suggest a relatively 'dry' peat accumulat-

Context			**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample			311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Volume of residue (litres)			0.12	2.20	0.375	0.90	1.30	1.20	0.08	1.05	1.75	0.85	0.20
Identified plant remains	**Vernacular name**	**Parts recorded**											
Betula pendula Roth/*B. pubescens* Ehrh.	silver/downy birch	female catkin-scale				+				++	++	++	
Betula pendula/pubescens	silver/downy birch	wingless nut		++		+				+++	++	++	
Betula pendula Roth	silver birch	winged nut								+++	++	++	
Betula sp.	birch sp. indet.	buds/bud scales					+		+				++
Betula sp.	birch sp. indet.	female catkin-scale					+		+				++
Betula	birch sp. indet.	fruits	+		+		+	+	+++				++
Carex	sedge	nut, utricle		+		++	++	++		+	+		
Ceratophyllum	hornwort	fruits							+				
Chara/Characeae	muskgrass/ stonewort	oogonium		+		+			+	++	+++	+++	+++
Cladium mariscus (L.) Pohl	saw-sedge	nutlets							+				+
Corylus avellana L.	hazel	nut shell					+			+		+	
Drepanocladus	moss							+++	+				
Hypnum cf. *cupressiforme* Hedw.	moss						+						
Menyanthes trifoliata L.	bog bean	seed							+				
Nymphaea alba L.	white water-lily	seed								+	+	+	

Context			**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample			311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Volume of residue (litres)			0.12	2.20	0.375	0.90	1.30	1.20	0.08	1.05	1.75	0.85	0.20
Populus	poplar/aspen	buds/bud scales											+
Quercus	oak sp. indet.	buds/bud scales					+		+				
Sorbus aucuparia L.	rowan	fruit							+	+			
?*Thelypteris palustris* Schott	marsh fern	shoots					+						
Other plant remains													
bark			+							+	+	+	
buds/bud scales										++	+	+	
moss									++				
plant fibres (epidermis)				+++		++					++		
rootlets					+++	+++	+++	+					
stem fragments					++							+	
tree leaf fragments									++				++
wood fragments (incl. twiglets)			+++	+	+	+	+					+	

Table 4: Complete list of plant macrofossils from the column samples of Section 18. Nomenclature follows Stace (1997). Abundances have been recorded semi-quantitatively on a three-point scale as follows: '+' = present, i.e. one or relatively few remains or less than 10% by volume; '++' = common, or about 10-50% by volume; '+++' = abundant, or more than 50% by volume. Samples suffixed '/T' were also included in the assessment, those suffixed '/T2' were only processed and recorded for the analysis.

ing environment (though the area was still clearly 'swampy' with very wet areas and probably shallow bodies of standing, though perhaps not always permanent, water) and this was also reflected in the macrofossil assemblages (Contexts 67, 71, 171 and 172). Concentrations of identifiable plant and invertebrate remains were reduced in these upper layers and aquatic and possible wetland species decline or were absent (e.g. *Characeae* spp., true sedges – *Carex*, white water-lily). At the same time, there was an increase in wood fragments (including twigs) culminating in these being abundant (with some bark also present) in the uppermost deposit (Context 67) which corresponds with the expansion of pine, hazel and alder evinced by the pollen in BED-5. A single fragment of a wood boring beetle *Grynobius planus* from Context 67 may also be an indication of trees growing locally.

The distribution of many insects in England is heavily influenced by temperature and consequently the distributions of various species in the past can be used as indicators of climatic change. The bug *Hebrus pusillus* is of interest in this regard as it is now confined to southern England (Macan 1956; Southwood and Leston 1959, 341-2). It was recorded from the samples from Contexts 173 and 174, and was especially common in the latter. The presence of this species may indicate that the climate of the area at the time the deposits formed was somewhat warmer than at present, perhaps with similar mean temperatures to those of the far south of Britain. In palaeoclimatological terms, the Atlantic period of Holocene northern Europe, with mean temperatures perhaps 2.5°C higher than today, begins between Cal BP 9000 and 8000 (ending around Cal BP 4300 and punctuated by a cooling event at around Cal BP 8200), with some regional variation (this period is still in the process of definition). Therefore, it seems likely that the sudden change in the biostratigraphy seen in Section 18 from Bedale at around 0.93m depth (from BED-1 to BED-2 and dated sometime after Cal BP 9290 and before Cal BP 8620) marks the beginning of the Atlantic period at this site. Contexts 173 and 174 would then have been deposited during this time of warmer climate which would have allowed *Hebrus pusillus* to extend its range to more northerly locales. It may also be that the less dramatic changes in the biostratigraphy seen for the starts of BED-4 and BED-5 are related to the cooling event of around Cal BP 8200.

OVERVIEW

Strata representing a localised body of water and a former wetland area were recorded in the backlots of properties on Market Place, Bedale. The accumulation of waterlain deposits – represented by laminated organic silts – began in the early Holocene, dated to Cal BP 9920-9600, the Mesolithic period in archaeological terms. It was not possible to determine for certain within the excavation area whether this body of water was a discrete feature such as a pond or lake or perhaps a palaeochannel. However, although the full extent of the feature was not exposed within the excavated area, it extended over an area measuring at least 75m NE-SW by 25m NW-SE, with the depth of deposits encountered along the south-eastern edge of the excavation area indicating that it continued for some distance to the south-east. The substantial size of the feature may therefore perhaps suggest that this is more likely to represent a pond or lake rather than a palaeochannel.

The lowest part of the organic silt deposits represents sediment accumulation which could have occurred either in a body of water or in slowly flowing water. The plant remains from these lower sediments included species that grow in fresh water. The invertebrate species from these deposits included a wide range of beetles and bugs that live in pond or lake environments along with beetles that live almost exclusively in running water. Five species of elmid were recorded and these beetles require well-oxygenated water such as in streams or rivers; several other taxa found in these deposits also require running water and are indicative of clear unpolluted waters. The palaeoenvironmental remains were thus inconclusive and, as details of the local hydrology in the early Holocene period are not known, the feature may represent an infilled palaeochannel, or the sampling point may have been located near to an inflow or outflow point of a pond. Elsewhere in the region, climatic improvement in the late glacial period led to the release of meltwaters, which caused drainage channels to be eroded near the edges of the ice-fronts (Hemingway 1993). As the ice receded further, the meltwaters no longer fed into these drainage channels and they developed into poorly-drained peat-filled hollows (ibid.). Bodies of water, such as Lake Pickering, also lost their inflows, leading to the deposition of laminated clays and the subsequent development of peaty marshes.

The overall picture was of a closed, hazel-dominated, woodland environment with some birch and elm present. This accords well with the general regional picture of lowland vegetation development in this area during the earlier Holocene (Day 1995). However, one would also expect oak to have formed a significant component of the woodland at Bedale, but this does not appear to have been the case. This is perhaps hard to explain on ecological grounds since this tree was well established in northern England by this time (Birks 1989), but interpretation of the wider landscape was hindered by the fact that for much of the sequence, and particularly from BED-2, the pollen record was strongly biased towards vegetation growing locally.

Following the growth of peat on the sampling site, from around Cal BP 9290-9020 BP, a sedge fen developed, and this vegetation dominates the pollen record for much of the diagram. This was evidently a relatively 'dry' peat-accumulating environment, with abundant ferns but few other wetland plants indicated. As mentioned above, phases of dry mire surface could be responsible for the low pollen concentrations in the BED-4 sequence after Cal BP 8395-8175 and the hiatus in BED-5.

The fluctuations in the arboreal taxa appear largely to reflect localised processes of competition between birch and pine connected to the growth of peat rather than competitive interactions in the wider landscape (see, for example, Bennett 1986).

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Taxon											
Cladocera spp. (ephippia)	+	+	++	++	+	-	+	++	+++	+++	++
Ostracoda sp.	-	-	+	-	-	-	+	-	+	++	+
Lygaeidae spp.	1	2	-	1	-	-	-	-	-	-	-
Cymus glandicolor Hahn	-	-	-	-	-	3	-	-	-	-	-
Cymus ?glandicolor	1	3	-	2	6	-	1	-	-	-	1
Saldidae sp.	-	-	-	-	3	1	-	-	-	-	-
Hebrus pusillus Fallén	-	-	-	-	1	18	-	-	-	-	-
Hebrus ruficeps Thomson	-	1	-	-	3	2	1	-	-	-	-
Gerris sp.	-	-	-	-	-	-	1	4	-	4	2
Corixidae sp.	-	-	-	-	-	-	1	3	1	1	1
Heteroptera spp.	-	-	-	-	1	1	-	-	3	1	-
Aphrophora major Uhler	-	1	-	-	1	1	-	-	-	-	-
Delphacidae spp.	2	22	-	21	12	-	1	4	1	2	3
Auchenorhyncha spp.	-	2	1	4	2	-	-	1	-	1	1
Psyllidae sp. indet.	-	-	-	-	-	-	-	1	-	-	-
Aphidoidea sp.	-	-	-	-	-	-	+	-	-	-	-
Bibionidae sp.	+	-	-	-	+	-	-	+	-	-	+
Diptera spp. (adults)	-	-	-	-	-	+	-	-	-	-	+
Diptera spp. (puparia)	-	-	+	+	+	-	-	+	-	-	+
Formicidae sp.	-	-	-	-	-	-	-	-	-	-	+
Hymenoptera Parasitica spp.	-	-	-	-	-	++	-	-	-	-	-
Leistus sp.	-	-	-	-	-	-	1	-	-	-	-
Clivina sp.	-	1	-	-	-	-	-	-	-	-	-
Trechus rivularis (Gyllenhal)	-	3	-	-	-	-	-	-	-	-	-
Bembidion (*Philochthus*) sp.	-	-	-	-	2	-	-	-	-	-	-
Pterostichus diligens (Sturm)	-	3	-	-	1	-	-	-	1	-	-

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Taxon											
Pterostichus minor (Gyllenhal)	-	-	-	2	-	-	-	-	-	-	-
Pterostichus nigrita (Paykull)	-	1	-	-	-	-	-	-	-	-	-
Pterostichus spp.	-	1	-	-	-	-	-	1	-	-	-
Agonum sp.	-	3	-	-	-	-	-	1	-	-	-
Carabidae spp.	1	1	1	-	3	2	-	1	2	-	2
Haliplus spp.	-	-	-	-	-	-	1	1	-	3	3
Noterus sp.	-	-	-	-	-	-	-	1	-	-	-
Bidessus unistriatus (Schrank)	-	-	-	-	-	4	-	-	-	-	-
Hygrotus inaequalis (Fabricius)	-	-	-	-	-	4	-	2	1	-	-
Suphrodytes dorsalis (Fabricius)	-	-	-	-	-	2	1	-	-	-	-
Hydroporus spp.	-	-	-	4	14	6	-	9	3	2	-
Stictotarsus duodecimpustulatus (Degeer)	-	-	-	-	-	-	-	-	-	1	-
Hydroporinae spp.	1	12	-	-	-	-	7	5	-	3	3
Agabus bipustulatus (Linnaeus)	-	1	-	1	-	-	-	3	1	1	-
Agabus sp.	-	3	-	1	-	-	-	3	-	-	1
Agabus or *Ilybius* spp.	2	3	1	-	1	2	1	8	3	4	1
Colymbetes fuscus (Linnaeus)	-	1	-	-	-	-	1	10	7	3	2
Colymbetinae sp.	-	-	-	-	-	-	-	-	-	2	-
?*Hydaticus transversalis* (Pontoppidan)	-	-	-	-	-	-	-	-	-	1	-
Acilius sp.	-	1	1	-	-	-	2	8	7	3	2
Dytiscus sp.	-	-	-	-	-	-	-	2	1	1	-
Dytiscidae spp.	1	-	-	-	-	-	-	1	-	-	1
Gyrinus sp.	-	1	-	-	-	-	-	-	2	2	1

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Taxon											
Hydrochus brevis (Herbst)	-	1	-	1	1	2	-	-	1	-	-
Helophorus spp.	-	-	-	-	-	-	-	1	1	2	-
Coelostoma orbiculare (Fabricius)	1	1	1	1	6	5	1	3	-	-	-
Cercyon spp.	-	3	-	1	4	-	-	1	-	-	-
Hydrobius fuscipes (Linnaeus)	-	1	-	1	1	-	1	6	3	1	-
Anacaena spp.	-	4	-	-	1	-	-	-	-	2	-
?*Hydrophilus piceus* (Linnaeus)	-	-	-	-	-	-	-	2	-	-	-
Hydrophilinae spp.	2	3	1	2	3	6	4	9	2	2	-
Ochthebius minimus (Fabricius)	2	15	-	8	-	7	16	74	49	57	23
Hydraena gracilis Germar	-	-	-	-	-	-	-	3	-	-	-
Hydraena ?palustris Erichson	-	5	-	1	4	1	4	2	3	2	2
Hydraena sp.	3	7	2	1	3	3	7	12	14	9	12
Limnebius aluta (Bedel)	-	7	-	3	9	9	3	2	1	-	2
Limnebius spp.	-	-	-	-	-	-	1	6	2	3	4
Ptenidium sp.	-	1	-	-	-	-	-	-	-	-	-
Acrotrichis sp.	-	2	-	-	-	-	-	-	-	-	-
Catopinae sp.	-	-	-	-	-	-	-	1	-	-	1
Silpha atrata Linnaeus	-	-	-	-	-	-	-	1	1	-	-
Micropeplus tesserula Curtis	-	-	-	-	1	-	-	-	-	-	-
Micropeplus sp. indet.	-	-	-	-	-	1	-	-	-	-	-
Metopsia retusa (Stephens)	-	1	-	-	-	-	-	-	-	-	-
Olophrum piceum (Gyllenhal)	-	-	-	-	1	-	-	1	-	-	-
Olophrum sp.	-	1	-	-	-	-	-	-	-	1	2
Eusphalerum sp.	-	1	-	-	2	-	-	-	-	-	-
Omaliinae spp.	-	3	1	-	2	2	-	1	-	-	-
Carpelimus sp.	-	1	-	-	1	-	2	-	1	-	1

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Taxon											
Aploderus caelatus (Gravenhorst)	-	-	-	-	-	-	-	1	-	-	-
Platystethus capito or *nodifrons*	-	-	-	-	1	-	-	-	-	-	-
Anotylus sp.	-	-	-	-	-	-	-	1	-	-	-
Stenus spp.	-	8	1	4	3	1	1	1	1	1	1
Paederus sp.	-	-	-	-	2	1	-	-	-	-	-
Lathrobium sp.	-	2	2	1	1	-	-	-	-	-	-
Ochthephilum fracticorne (Paykull)	-	-	-	-	-	-	1	-	-	-	-
Paederinae spp.	-	2	-	-	-	-	-	1	-	-	-
Erichsonius cinerascens (Gravenhorst)	1	1	-	1	2	1	-	-	-	-	-
Philonthus sp.	-	-	-	-	-	-	1	-	-	-	-
Staphylinus ?caesareus Cederhjelm	-	-	-	-	-	-	-	1	-	-	-
Quedius sp.	-	-	-	-	-	-	-	1	-	-	-
Acylophorus glaberrimus von Nordmann	-	-	-	-	-	2	-	-	-	-	-
Staphylininae spp.	-	2	-	-	2	1	1	1	2	-	-
Aleocharinae spp.	2	9	4	10	18	7	2	4	3	3	2
Amauronyx maerkeli (Aubé)	-	4	1	1	5	1	1	-	-	-	1
Pselaphus heisei (Herbst)	-	1	-	-	-	-	-	-	-	-	-
Pselaphidae spp.	2	3	-	1	2	-	-	-	-	1	-
Aphodius spp.	-	-	-	-	-	-	1	3	1	-	1
Cyphon padi (Linnaeus)	-	-	22	23	28	13	-	13	5	1	2
Cyphon spp.	4	39	5	14	19	8	2	12	-	3	1
Dryops sp.	-	1	1	1	1	-	-	-	-	1	-

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Taxon											
Elmis aenea (Müller)	-	-	-	-	1	-	-	7	5	5	2
Esolus parallelepipedus (Müller)	-	-	-	-	-	-	1	6	3	4	1
Limnius volkmari (Panzer)	-	-	-	-	-	-	-	3	9	11	3
Normandia or *Riolus* sp.	-	-	-	-	-	-	-	-	-	-	1
Oulimnius sp.	-	-	-	-	-	-	-	3	4	4	1
Melanotus sp.	-	-	-	-	-	-	-	-	1	-	-
Elateridae spp.	-	3	-	-	-	-	-	1	-	-	1
Elateridae sp. (larval apices)	-	2	-	-	-	-	-	-	-	-	-
Cantharidae spp.	-	-	-	-	-	-	1	4	2	4	1
Grynobius planus (Fabricius)	1	-	-	-	-	1	1	-	-	-	-
Cerylon fagi Brisout	-	-	-	-	-	-	-	-	1	1	1
Corticariinae spp.	-	1	-	-	1	-	-	2	1	-	-
?Corylophidae sp.	1	10	-	3	-	-	-	-	-	-	-
Rhinosimus sp.	-	-	-	-	-	-	1	-	-	-	-
Plateumaris sp.	-	-	-	-	-	-	-	2	-	1	-
Donacia sp.	-	-	-	-	-	-	-	1	-	1	-
Donaciinae sp.	-	-	-	1	-	-	1	-	1	-	1
Lochmaea sp.	-	-	-	-	-	-	-	-	1	-	1
Altica spp.	-	-	-	-	2	-	-	-	-	-	-
Halticinae spp.	-	-	-	1	-	1	-	-	-	-	-
Chrysomelidae sp.	-	-	-	1	-	-	-	-	-	-	-
Apion spp.	-	-	-	-	-	-	1	2	1	-	1

Context	**67**	**71**	**171**	**172**	**173**	**174**	**175**	**176**	**176**	**176**	**176**
Sample	311/T	310/T2	309/T	308/T2	307/T	306/T	305/T	304/T2	303/T	302/T2	301/T
Phyllobius or *Polydrusus* sp.	-	-	-	-	-	-	-	3	1	1	1
Tanysphyrus lemnae (Paykull)	-	-	1	1	-	1	1	1	-	-	-
Ceutorhynchinae sp.	-	-	-	-	-	-	-	1	-	-	-
Limnobaris sp.	-	1	-	-	-	-	-	-	-	-	-
Curculionidae spp.	4	17	3	3	2	-	1	1	-	2	2
Scolytidae sp.	-	-	-	-	-	-	-	1	-	-	-
Coleopteara spp.	2	2	-	3	2	2	1	-	5	6	-
Insecta spp. (larva)	-	++	-	++	+	++	++	-	+	-	-
Acarina spp.	+	++	++	++	++	++	-	+	-	-	++
Araneae spp.	-	-	-	-	+	+	-	-	-	-	-
Valvata cristata Müller								++	++	++	++
?planorbid sp. indet.											+
Pisidium sp.										+	
Mollusca spp.								++	++	++	++

Table 5: Complete list of invertebrate remains from the column samples of Section 18. Nomenclature and taxonomic order for beetles and bugs follows Kloet and Hincks (1964-77). Snails follow Kerney (1999). Figures are minimum numbers of individuals represented. The abundance of other orders has been recorded semi-quantitatively on a three-point scale as follows: '+ ' = present, i.e. one or relatively few remains or less than 10% by volume; '++' = common, or about 10-50% by volume; '+++' = abundant, or more than 50% by volume.

Following the spread of the main arboreal taxa at the opening of the Holocene, competitively inferior taxa such as birch and pine were excluded to poorer or wetter soils such as those that were present at and around the sampling site. The pollen diagram derived from Section 18 at Bedale therefore provides a 'snapshot' of the local processes of vegetation change in the vicinity over a period of about 1500 years; such site specific information tends to be invisible in the analysis of pollen sequences from multiple sampling sites which reflect changes in the vegetation of the wider landscape (see Day 1995).

Overall, the plant and insect assemblages support the pollen evidence indicating aquatic deposition throughout, though in the upper (peat) layers of the sequence this was in a swamp environment rather than the open water implied by the assemblages from the lower (mud/organic silt) layers. The insect assemblages in particular mirror the pollen evidence for a natural hydroseral succession leading to swampy sedge fen with *Myrica* (though there was no specific evidence for this plant in the botanical material). Of particular note were records of remains of the bug Hebrus pusillus which imply that a mean temperature around 2.5°C higher than today prevailed between c. Cal BP 9290 and Cal BP 8620 and suggest that this marks the beginning of the Atlantic period of the Holocene for this site.

At Bedale, the recovered data provides important information regarding the local natural habitats of the Mesolithic period but, unfortunately, no insights regarding human interaction with the environment; there was a complete absence of evidence for human activity (e.g. no synanthropic invertebrates or micro-/macrofossil charcoal). The density and extent of Mesolithic settlement remains unclear for the region as a whole, largely as a result of the limited amount of archaeological research that has been undertaken, and evidence for general activity of the period is restricted to a relatively small number of flint scatters. One example of the latter comes from fieldwalking around the Thornborough area, approximately 8km south-east of Bedale, where a small but significant quantity of recovered flint probably represents small scale episodic activity in keeping with a general Mesolithic hunter-gatherer model of mobile family groups (Harding 2003). Such groups would have exploited a wide range of resources, with a subsistence economy based on hunting, fishing and the collecting of wild plant foods (e.g. fruits, berries, nuts and roots). Any localised variations in habitat, such as the wetlands at Bedale, would likely have been utilised as a resource base in the subsistence pattern of the culture.

Despite the lack of evidence for human activity in the Mesolithic period in the data recovered from Bedale, other sites in the region have provided evidence for human modification of the environment at this time. Archaeological investigations at Seamer Carr, near Scarborough in the Vale of Pickering, have revealed important information about Mesolithic exploitation of a lowland area in North Yorkshire, as well as the environmental conditions prevalent at the time. Deposits similar to those seen at Bedale, provided evidence of a range of environments including open water, reed-bed, saw sedge and fen carr, together with small islands occupied by ferns and birch woodland (Simmons *et al.* 1993, 20). However, unlike the Bedale deposits, the peat deposits at Seamer Carr contain a thick band of charcoal at the transition to the Atlantic period of the Holocene, a time when the margins of Lake Pickering were beginning to dry out, and the pollen diagram at this time shows an increase in alder pollen, as well as an atypical increase in grasses and other open habitat taxa (*ibid.*, 21). These observations, together with the presence of Mesolithic artefacts along the former lake margins at Seamer Carr, argue for an interpretation of the charcoal layer to be a result of deliberate clearance by humans rather than natural fire (*ibid.*).

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NEOLITHIC SETTLEMENT EVIDENCE FROM HAYTON, EAST YORKS

By Peter Halkon, T. G. Manby, Martin Millett
and Helen Woodhouse
with contributions from Rachel Ballantyne, Barry Bishop,
Jacqui Huntley and Deborah Jaques

INTRODUCTION

In the period 1995-2001 excavations were undertaken on an Iron Age and Romano-British settlement at Burnby Lane, Hayton (NGR SE 82554650) as part of the Hayton Landscape Project (Fig. 1). Throughout these excavations prehistoric worked flints were consistently found in the topsoil and redeposited in other contexts. During the 1999 excavation season a group of four shallow pits containing

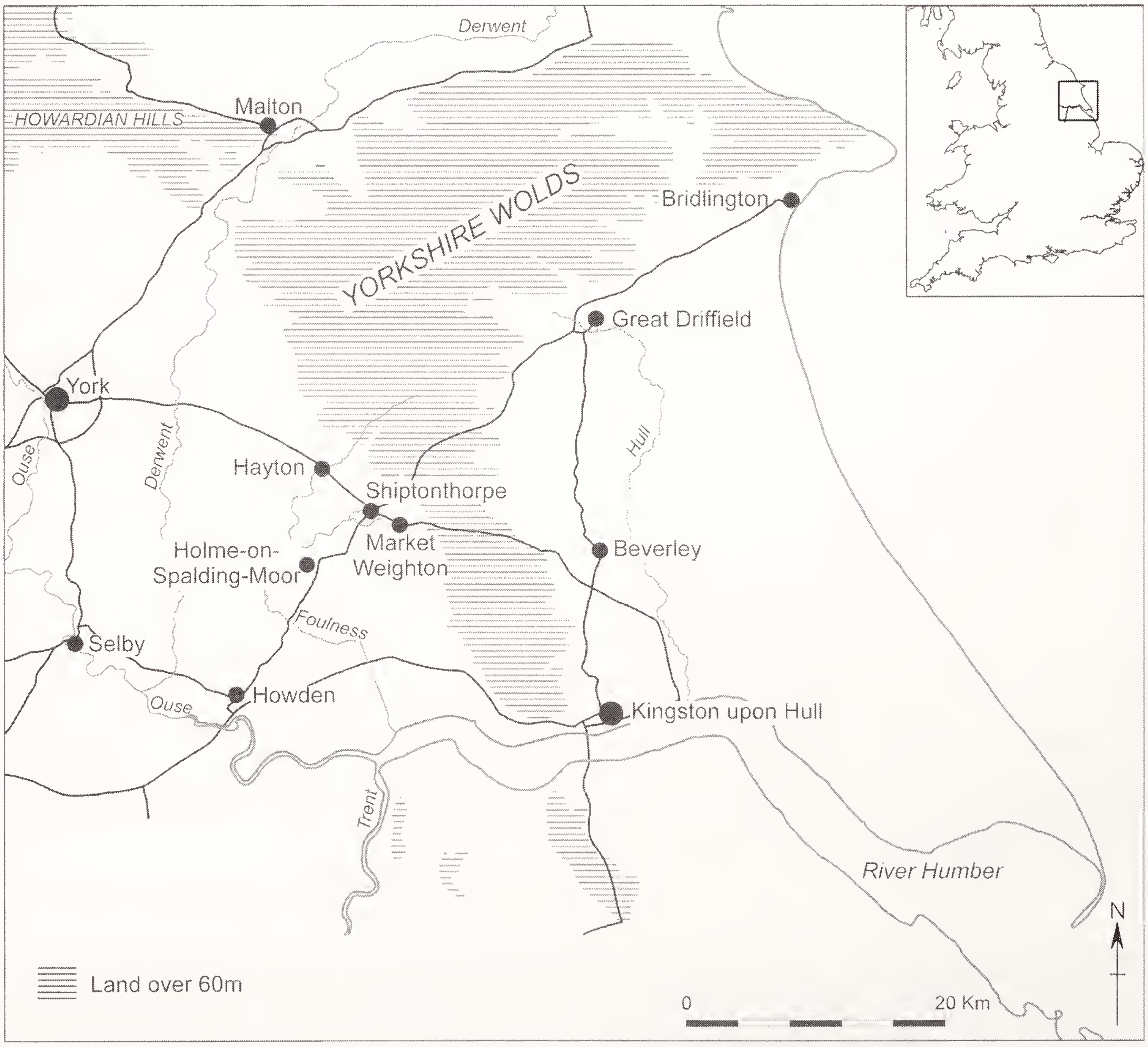

Fig. 1: Location of Hayton in East Yorkshire

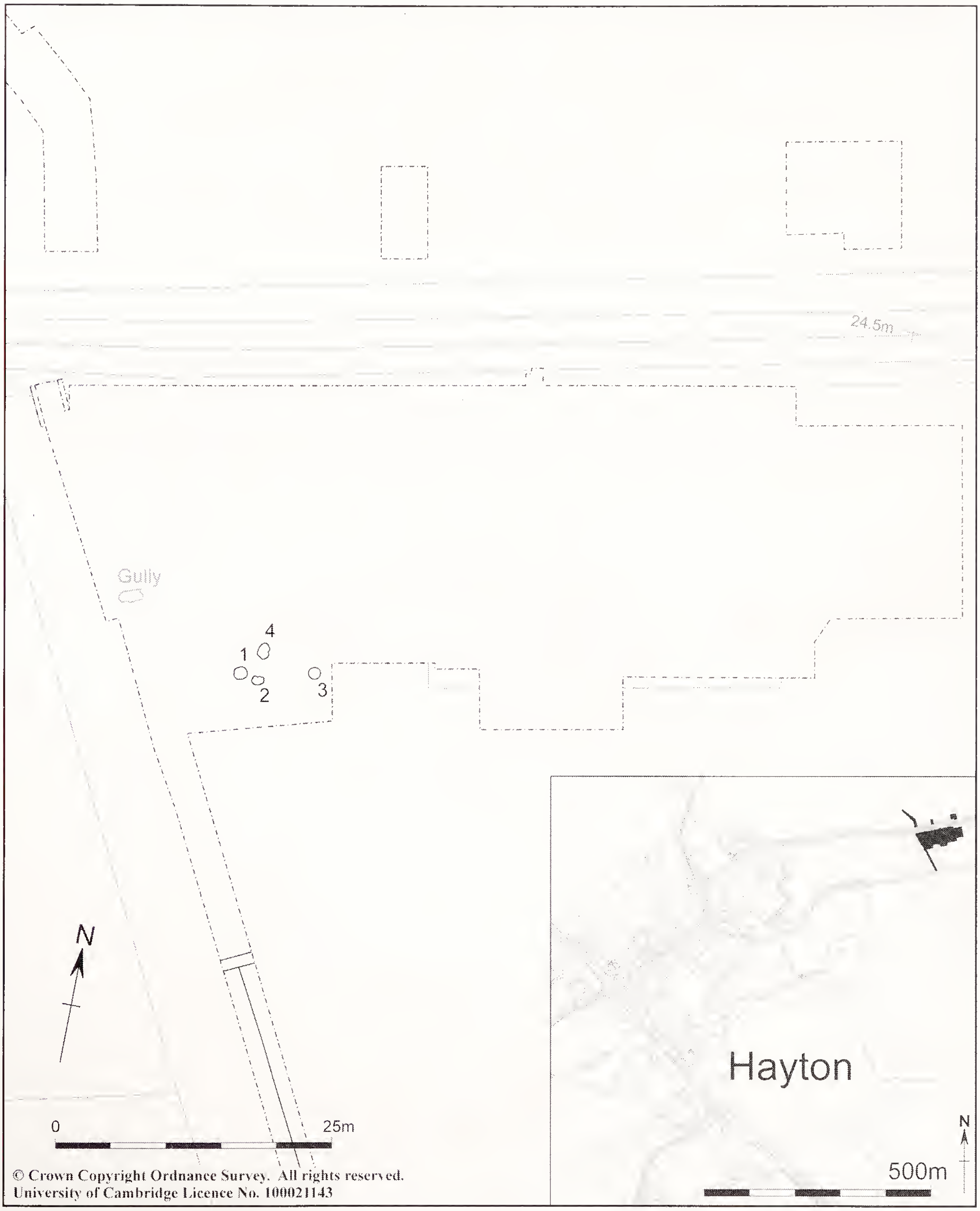

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Fig. 2: Location of excavated features

Neolithic pottery were excavated. The present paper provides a report on these features and their contents. Full information on the later phases of the site will be the subject of a forthcoming monograph (Halkon *et al.* in prep.). The finds and site archive are held at Hull City Museums (Accession no. KINCM 1020.1995).

The site lies immediately to the south of Burnby Lane in a field just east of Hayton. It is located on a well-drained but narrow gravel terrace at about 24m above sea level that runs along the north side of the Burnby Beck. This stream flows from the chalk hills of the Yorkshire Wolds southwards to join the Foulness drainage system and thence into the Humber. The excavation uncovered a total area of 3438.5m^2, and revealed a long and complex sequence of Iron Age and Romano-British settlement features. In addition, there were a number of undated post holes and pits: it is not impossible that some of these are also Neolithic in date but we have no reason to believe that this is the case. For this reason only the pits and their contents are presented here, together with the flints from the excavation which are broadly contemporaneous. As the pits were clustered towards the southern and western limits of the main area of the excavation it is reasonably likely that further Neolithic features may remain undiscovered. In addition to the stratified Neolithic pottery one residual rim sherd was identified in the fill of a Roman-period gully.

THE EXCAVATED FEATURES

The four pits (Fig. 2) were identified as Neolithic on the basis of the pottery: all were cut into the natural gravel and sealed by ploughsoil. Ploughing had removed any surface deposits in this part of the site whilst Pits 2 and 3 had also been badly truncated by a major Iron Age enclosure ditch. Pits 1, 2 and 3 were recognized as being Neolithic at the time of excavation so were fully sampled with their contents being floated. Samples from the other pit were taken as part of the routine sampling of the site but it was only recognised as being of Neolithic date after excavation.

Pit 1 (Fig. 3 & Fig. 4)

(Contexts 1784 cut, fills: 1783, 1786, 1787, 2018)

Although slightly over excavated (2018) the pit was sub-rounded c. 1.17m in diameter with a shallow U-shaped profile, 0.27m in depth. Its fills 1783, 1786 and 1787 consisted of reddish orange silty clays.

Pit 2 (Fig. 3 & Fig. 4)

(Contexts 2063 cut, fills 2064 and 2165)

This pit had been severely truncated by an Iron Age ditch but appears to have been of roughly similar shape and size to Pit 1. It was sub-rounded with a shallow U-shaped profile, c. 0.6m in diameter and up to 0.20m in depth. The fill comprised red brown silty clay fill with frequent charcoal flecks.

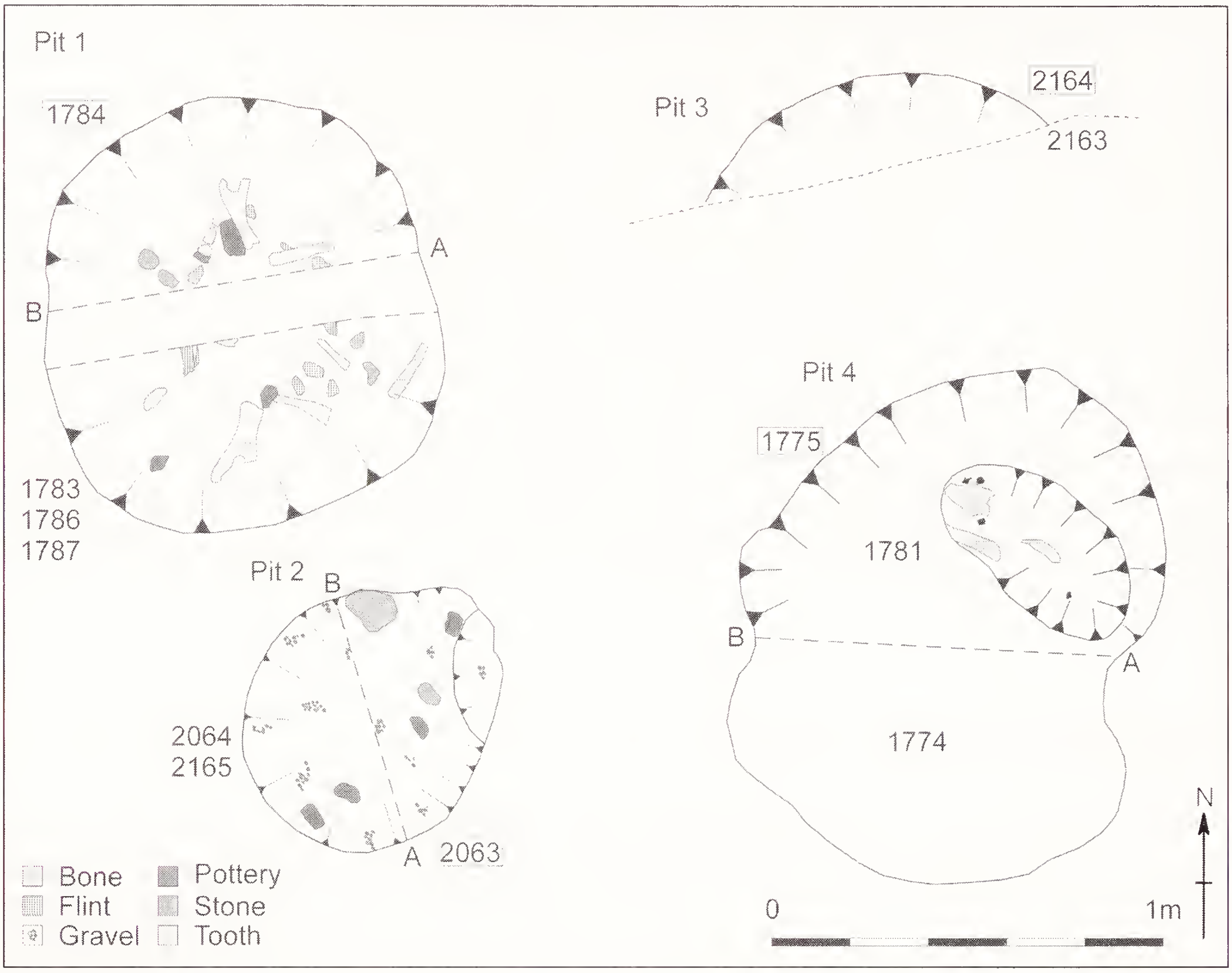

Fig. 3: Plans of excavated features

Pit 3 (Fig. 3 & Fig. 4)

(Contexts 2164 cut, fill 2163)

This feature was both cut by a medieval plough furrow and truncated by an Iron Age ditch. It was probably originally of similar shape and size to Pit 1 and had a shallow U-shaped profile, c. 1.1m in diameter and 0.31m in depth. The fill was a red brown silty clay fill with frequent charcoal flecks.

Pit 4 (Fig. 3 & Fig. 4)

(Contexts 1775 cut, fills 1774, 1781 and 1780)

This had a distinct kidney-shaped plan, c. 1.30m by c. 1.0m, with a shallow U-shaped profile c. 0.33m in depth. Its fills were a series of fine yellow brown silty clays.

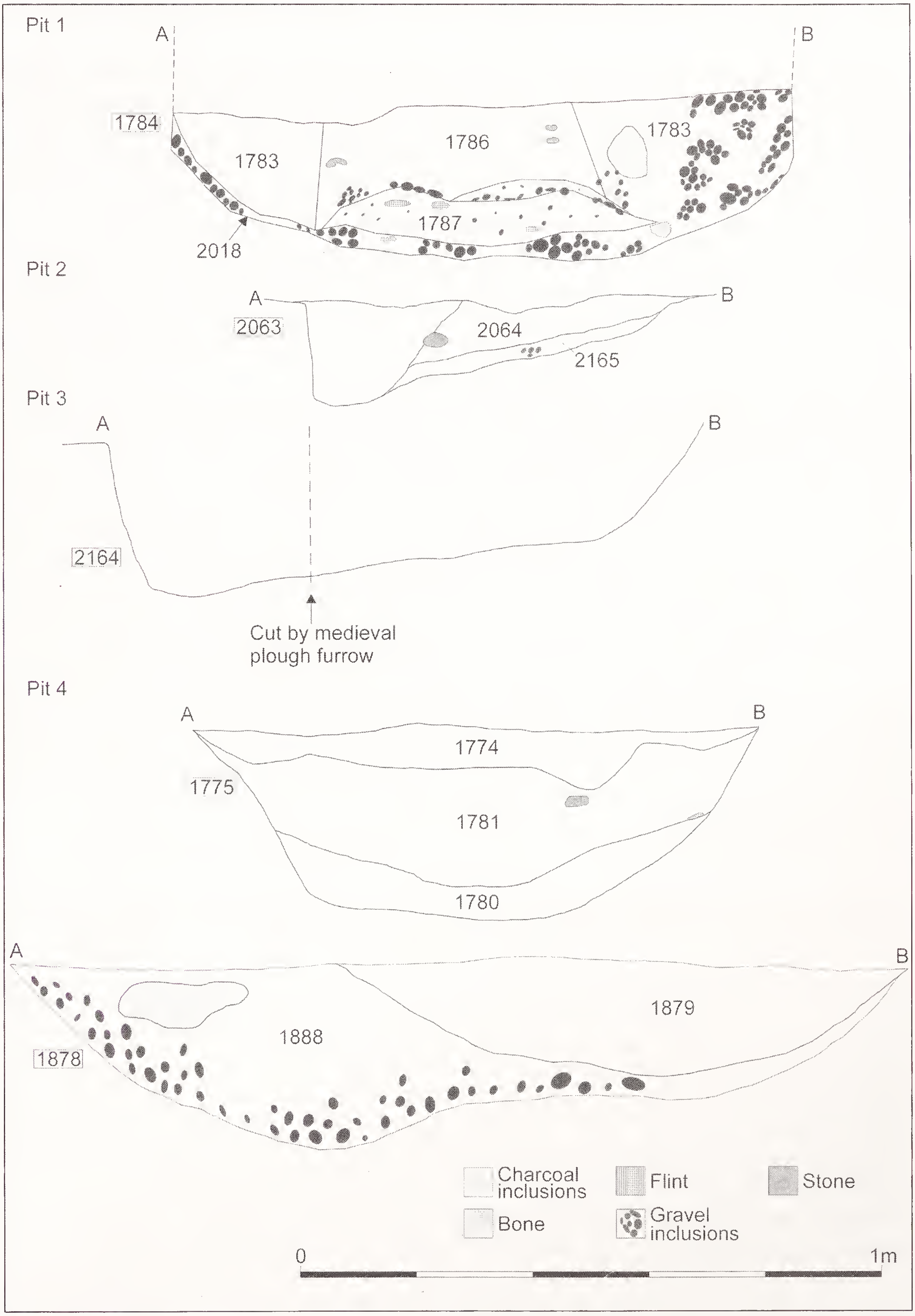

Fig. 4: Sections of excavated features

THE GROOVED WARE POTTERY by T. G. Manby

A small fragmented Grooved Ware assemblage came from a pit cluster (Table 1), the majority of pieces in the infillings of Pits 1 and 4. The largest fragments do not exceed 5 cm across, and there are featureless pieces less than 1 cm diameter classified as flakes if angular and split-off the wall or as crumbs if shapeless and eroded. All sherds show sharp-edged fractures with the exception of GW2. The sherds were examined with a x10 hand lens to determine temper characteristics and to search for organic impressions and carbonised traces. A comparison of fabric and decorative treatment indicates eight to ten vessels are represented. There are no complete profiles and only limited portions of rims and base angles of flat bases are present. From the base angles the vessel wall profiles appear to be slightly splayed outwards, consistent with tub or bucket shapes. Conjoining sherds were sought within each context and then they were compared between contexts. A cross linkage between Pits 2 and 4 was established by the joining pieces of the same vessel GW3 in each of these pits. A single small sherd in Pit 1 with 'crimped' decoration may also derive from the same vessel as GW5, in Pit 3, based on their fabric and the rarity of the distinctive decorative technique. The sherds are generally in an un-weathered condition and absence of erosion to broken edges would suggest deposition in the pits during a contemporary infilling event. The ceramic contents of the respective features are described in the excavation archive and are summarized in Table 1. There are at least six determinable vessels present that are described in the illustrated catalogue below, and possibly three more in terms of fabrics represented by very small sherds amongst the Pit 1 finds. The temper materials present in the Hayton pottery are entirely consistent with local manufacture, even the igneous fragments may be sourced to the Vale of York series of Devensian Age tills, erratics and gravels.

Pit no.	**Context**	**Sherds**	**Flakes & crumbs**	**Weight (g)**	**Illustrated vessels**
Pit 1	(1783)	8	23	20	
	(1787)	8		78g	GW1 and GW2
Pit 2	(2064)	14		57	GW3 and 4
Pit 3	(2163)	2		5	GW5
Pit 4	(1780)	4	10	20	GW3
Roman Gully [1866]	(1832)	1		4	GW6
Totals		**37**	**33**	**184**	

Table 1: Summary of Grooved Ware Pottery by Feature and Context

Illustrated Catalogue (Fig. 5).

GW1: Rim, base angle and two wall sherds of a small bowl, incomplete profile. Rim diameter about 115 mm.; base diameter 100 mm. Well-modelled base angle and foot rim to a hollow base. Simple rim, internal zone of diagonal crescentic incision, indications of a criss-cross arrangement. Exterior has modelled converging ridges and grooves, on the lower body linked by an applied lug on one sherd. Hard compact orange-buff surfaces, dark grey core, layered wall structure. Common well rounded fine sand temper, rare angular chalk and igneous fragments, and voids <2 mm. Wall thickness 6-7 mm.
Pit l: Context 1787.

GW2: Two joining fragments of a large thick walled vessel, slightly weathered, interior scaled off. Closely spaced horizontal grooves flanking a moulded wavy-line. Orange-buff exterior, dark grey core, layered wall structure. Common sand, a decayed chalk pebble <7 mm. and some small flakes of charcoal.
Pit 1: Context 1787.
With the above in Pit 1, infilling layers, were other small pieces in varying fabrics:
a. Three small pieces of a moulded ridge, 6 mm. wide. Compact dark grey fabric, buff surface. Context 1783.
b. A base angle and four small wall sherds. Soft dark grey, orange-buff exterior, interior scaled. Fine sand, scarce igneous fragments and rounded voids <2 mm. Context 1783.
c. Small wall sherd, weathered. Low moulded ridge notched alternately along its upper and lower edges. Compact brown surface, dark grey core, fine angular sand and chalk temper and rare fragments of white flint <1 mm. Wall thickness 6 mm. Context 1787.
d. Two small sherds, exterior surfaces scaled off. Compact orange, exterior scaled off. Fine sand temper. Context 1787.

GW3: Nine joining sherds of the lower wall and base angle, l70 mm. diameter, also four pieces of flat base and a small wall sherd that do not join. Thin walls show evidence of ring built construction. Hard, compact dark grey fabric, orange-buff exterior. Converging bands of three and four parallel incised lines, with closely spaced diagonal 'maggot' impressions between the lines. Plain horizontal lozenge zones are created by the incised bands and there is a triangular zone left where they meet the horizontal band of lines and 'maggot' imprints above the base angle - their junction lying beyond the fragments broken edge. Horizontal tooling around interior base angle. Common temper of angular sand and grog, some voids <3 mm. Wall thickness 6 mm.
Pit 2: Context 2064.

Joining on to the above - three conjoining base angle fragments in Pit 4, context 1775.

GW4: Small rim sherd, rounded lip with internal groove; under the lip a plain zone than an incised horizontal line defining a ridge with ill-defined impressions. Soapy dark grey, fragments of coarse angular sandstone and voids <3 mm. Wall thickness 4 mm.
Pit 2: Context 2064.

GW5: Small rim and wall fragments of a cup. Expanded rim with internal overhanging bevel decorated with a closely spaced herring bone of finely incised lines. Moulded exterior ridges and grooves, the ridge below the rim is alternately notched along the upper and lower edges. Brittle orange-buff, grey core. Common fine sand temper and scattered angular chalk and flint <2 mm. Wall thickness 6 mm
Pit 3. Context 2163.

GW6: Rim sherd; simple lip, fine diagonal crescentic lines (?finger-nail) over the interior edge. Under the lip are shallow moulded ridges and shallow grooves above an applied rib. Soft orange fabric, fine sand temper, scarce angular chalk fragments and some rounded voids <2 mm. Wall thickness 5 mm.
Residual in Roman Gully cut 1866, fill context 1832.

DISCUSSION

This fragmentary assemblage consists of flat-based tub-shaped vessels, of small size, except for a single sherd, GW2, that derives from a large jar in a coarser fabric. All the vessels display two or more decorative elements of horizontal or converging ornament by applied strips, grooves or incision that outline elongated lozenge and triangular areas which with select motifs, such as wavy lines, characterize the Woodlands style, or sub-style of the Grooved Ware tradition (Wainwright and Longworth 1971, 238-40). When Ian Longworth defined his four stylistic variations of the Grooved Ware tradition (Wainwright and Longworth 1971, 236-48), the Woodlands, Clacton and Durrington Walls styles then had site distributions concentrated in southern England, and distant from the insular cluster of the Rinyo Style in the Orkneys (Wainwright and Longworth 1971, 268-306, fig. 97). Over the past three decades numerous discoveries of Woodlands, Clacton and Durrington Walls style sites across the intervening extent of eastern, midland and northern England and Scotland show collectively they each have 'mainstream' distributions between the Moray Firth and the English Channel (Cleal and MacSween 1999, 177–206).

Sharing some stylistic characteristics in decorative motifs, techniques and vessel forms these three defined styles, apart from some showing regional bias, are not

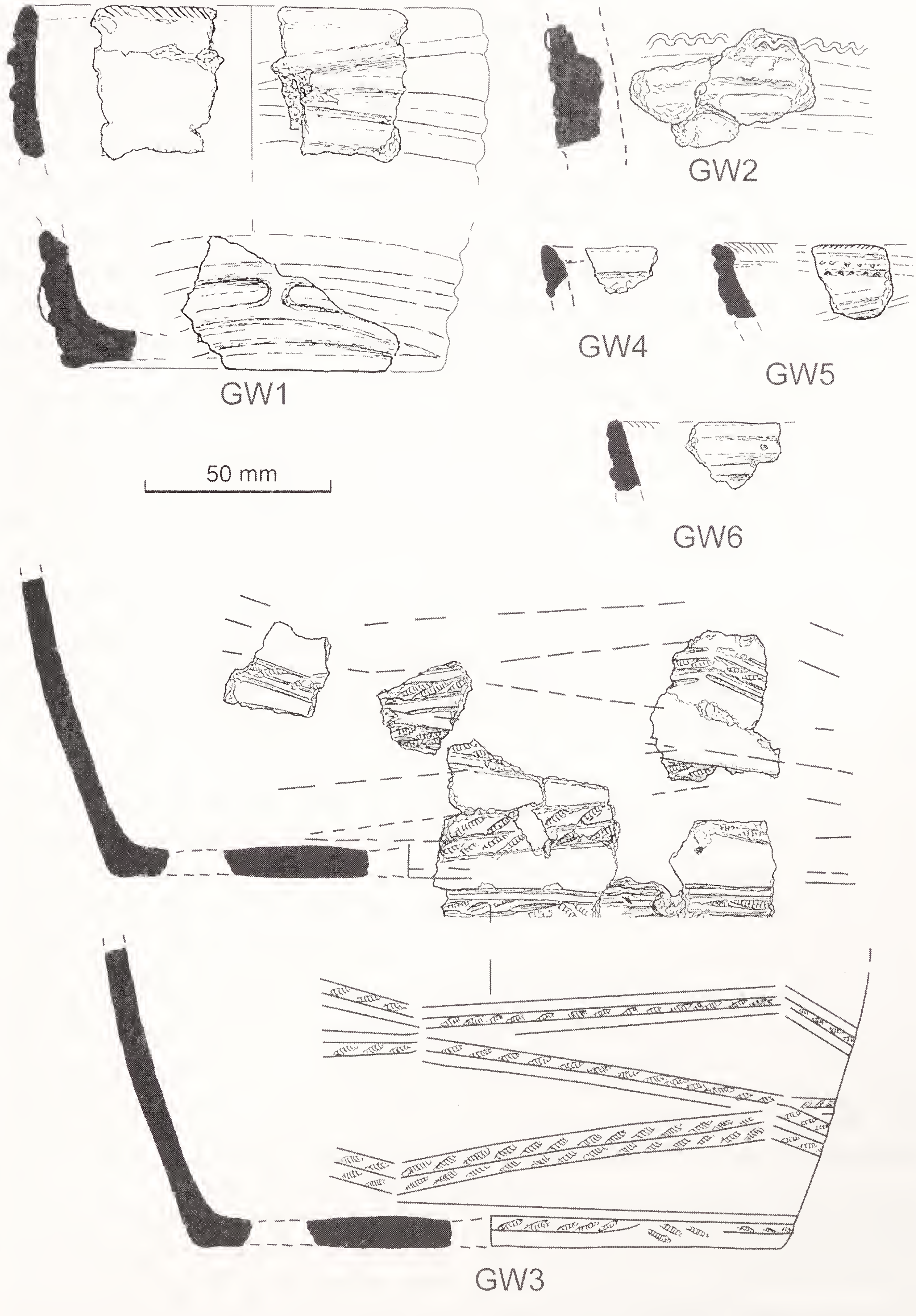

Fig. 5: Woodlands Style Grooved Ware (Scale 1:2)

regionally exclusive in their distribution (MacSween 1995; Brindley 1999a and b; Cleal 1999); however, there are still some assemblages that do not conform and may emerge as localized sub-styles. In contrast to the bucket and barrel shapes of the Durrington Walls Style, the Woodlands and Clacton styles are characterized by open tub-shaped vessel forms and they have some decorative motifs and techniques in common; it has been suggested that Woodlands and Clacton should been seen as developments of a single style in southern England (Garwood 1999, 10). The Woodlands Style, originally recognized by Isobel Smith (1965), was defined on fragmentary small vessels from pit clusters near to the Woodhenge monument at Amesbury (Stone and Young 1948; Stone 1949); such Wiltshire sites can now be seen to be close to the southern extent of this mainstream style's distribution. A much broader characterization of the Woodlands Style has been provided by excavations at Balfarg monument complex, Markinch, Fife, in eastern Scotland. This site had a fuller size range of vessel types, including large coarse ware versions. Diagnostic geometric motifs and decorative techniques were well represented along with some casual decorative embellishments (Henshall 1993, 94-103). Close parallels were seen between the Balfarg Riding School and Henge Monument Grooved Ware (Henshall 1993,104-06; Henshall and Mercer 1981, 129) and some Yorkshire assemblages where the Woodlands Style is well represented (Manby 1999, 60-64). The pit assemblages at Hartendale, Flamborough (Manby 1974, 70-74), West Heslerton (Powlesland in prep.), and the Vale of Mawbray sites at Marton-le-Moor (Tavener and Speed in prep.) all provide a range of vessels from small tubs to large bucket-shaped jars. They also display characteristic decoration applied variously to the whole or only to the upper exterior (Manby 1996; Abramson 2003).

The Hayton pottery displays some features for further comparison:

GW1. This is a small convex sided bowl, finely modelled and finished with an orange slip coating; but the full profile and the decorative scheme are not extant. The upper body's exterior below the rim is decorated with applied diagonal ridges that probably converge at junctions which may have been the site for an applied lug, or 'knot', such as that joining the pair of ridges on the lower body. The strongly curved lower zone ridges suggest that they followed an undulating course around the fuller circumference. Comparable small bowls without further embellishment to their ridges occur at Marton-le-Moor (Tavener 1996, fig. 3.8; Tavener and Speed in prep.), and further afield from Barholm Pit 13 (Simpson 1993, 20, fig. 12,13), Eye Kettleby, Leicestershire (Woodward forthcoming), and Honington, Cambridgeshire (Piggott 1949, fig.2.1-2; Fell 1951, 34, Pl. VIII, t-2).

GW2 is a single fragment of a large vessel which has a 'wavy' line cordon modelled with the aid of a round tipped tool that is a technique (Cleal 1999, illus. 1.1, c) uncommon in Yorkshire but which occurs in the Fimber Church assemblage on two small tubs or cups (Manby 1974, 11, fig. 3.1, 2 and, 4). Wavy line cordons modelled in this fashion, and occasionally by excision, are a feature of the Woodlands Style appearing at sites across the full extent of its north-south distribution. They are well represented at Balfarg Riding School (Henshall 1993, 98, P44-5, 53a- 54, 61-63), in eastern England at Barholme Hollow 8 (Simpson 1993, 18, fig. 11, 17) and Honington (Piggott 1949, fig. 2,3), and in southern England at the Woodlands site (Stone and Young 1948, 292, fig. 2,6). The wavy line motif also appears on a larger scale as an applied strip in some other Grooved Ware styles: in the Rinyo Style of the Orkney sites (MacSween 1995, 42; Sheridan 1999, 119-120, illus. 12.6), and in the Clacton Style at its type site (Longworth 1971, 100, Pl. xxxiii, P1.).

GW3 is the lower body of a thin walled vessel of small bowl or jar size. Its decoration of converging bands of three, and in places four, lines of bold incised parallel lines can be reconstructed as elongated lozenges bounded by a band of horizontal lines just above the base angle. This motif of elongated lozenges variously formed individually or in combination by applied ribs (eg. GWI), grooves and incised line techniques was common to both the Woodlands and Clacton Styles. The latter style favoured the infilling of the enclosed space with point stabbing, short strokes or finger tip rustication (Longworth 1971, 100, fig. 3; P5, 9 and.47). Comparable use of separate bands of parallel lines that do not join up at their junctions comes from Balfarg Riding School (Henshall 1993, illus. 27, P42), where elongated lozenge constructs in other techniques are well represented.

GW3 also has a most unusual feature in the 'maggot' imprints between the pairs of lines. The fineness of the impressions would suggest the use of a sinew wrapped around a thin flexible core, and not the usual twisted cord. This is a very rare technique for the Woodland Style, the only comparable use being the fine 'maggot' impressions that divide an applied rim pellet of a small bowl from Barholme Pit 13, (Simpson1993, 20, fig. 12,34). An anomalous use of a 'maggot' imprinting has been commented on for the Clacton Style assemblage from Hunstanton, Norfolk, where a whipped cord 'maggot' formed a 'stop' to the grooved decoration, reminiscent of the lugs of 'knots' linking the converging lines or moulded ridges that are characteristic of the Woodland Style (Cleal 1993, 42 and 50l, fig. 39, P6). In the wider Grooved Ware tradition only in the Durrington Walls Style are there characteristic twisted cord impressions amongst the decorative techniques. However the form of individual 'maggot' imprinting was a minor technique, notably rare at the type site (Wainwright and Longworth 1971, 242), and in eastern Yorkshire sparingly employed at Carnaby Top Site 20 (Manby 1974, 33, fig.11.3). The wider employment of 'maggot' imprints in the Durrington Walls Style assemblages has recently been reviewed by A.M.Gibson in connection with the internally decorated open bowl at Upper Ninepence, Walton, Powys (Gibson 1999, 83, fig. 54, P34), where he specifically observed that such fine quality 'maggot' imprints used in a ladder motif could only have been produced by a use of thread whipping in place of the usual thicker twisted cord.

GW5 is a slightly worn rim fragment with an exterior ridge showing faint alternate notching along its upper and lower edges. This was made with a point to produce a 'crimpled' effect that is a defining technique present at the Woodlands type site (Stone 1949,125, fig. l, b-d). Widely represented at sites across the Woodlands Style distribution, Balfarg Riding School has many well executed examples of this technique (Henshall 1993, 98, P48-49) along with casual versions producing rows of dots along the edges of the cordon.

Three vessels (GWl, GW4, GW6) have simple rims, and GW5 is the only internally expanded type. Apart from the plain lip GW4, embellishment is confined to diagonal fine incised lines, or possibly finger nail imprints. There are no applied rim features, a common characteristic of the Woodlands Style, (Manby 1999, 64, table 6.3) but the extent of rim circumferences is very limited. The size range of vessels can only be calculated in terms of diameters:- GW1 and GW3 fit into a 150-200 mm rim diameter range for the small jars/bowls class; GW5 and GW6 are in the c.100 mm rim diameter size range of tubs/cups (Manby 1999, 60); GW2 clearly represents a vessel of larger size.

Over the past three decades evidence for the distribution of Grooved Ware sites has been steadily increasing across Yorkshire (Manby et a1. 2003, 55) and in other regions of Northern England (Manby 1974, 3-10; 1999, 69-73). Hayton was the first recognised Grooved Ware association from the Vale of York lowlands. Subsequently a second site in this Wold-foot zone was provided by Durrington Walls Style fragments in the fillings of pit features at Pocklington Water Treatment Works (excavated by Northern Archaeological Associates). Grooved Ware in the Woodlands, Durrington Walls and Clacton Styles is well represented in eastern Yorkshire, from the Wolds to the east and in the Vale of Pickering (Manby 1988, 69-71). Some stray sherds specifically of the Woodlands Style have been recovered from some barrow mound structures (Manby 1974, 13; 1999, 72), but the majority of contexts are fragmentary assemblages associated in small pits, variously single or paired or as clusters. Notable are the single pits at Fimber (Manby 1974, 11, fig. 3.1-6), and Langton Wold (Manby 1974, 13, fig. 3.9-10) where only small sized tubs are represented. A wider range of large and small vessel types occurred at Hartendale, Flamborough (Manby 1974, 70-74, fig. 30), Garton and Wetwang Slacks (Manby 1999, 72), and Sewerby Cottage Farm (Fenton-Thomas forthcoming). These pit clusters occur both at high level on the Wold tops and at low level in dales and slacks. The Hayton location in the gravel zone at the foot of Wolds is comparable to West Heslerton in the Vale of Pickering (Powlesland in prep.).

The Hayton vessels provide no evidence of their usage. There is no carbonized residue encrustation, nor are there wear marks that can be linked to functional activities. Initial results obtained by a research programme of absorbed residue analysis applied to Neolithic pottery have identified the trace signature of pig adipose fat in the fabric of 16% of Grooved Ware tradition pottery sampled (Mukherjee *et al.* 2007, 748). Details of the styles, decoration and vessel types provided with these results have still to be published. No Grooved Ware from Northern England was included within this programme.

Dating

The two dates obtained from carbonized hazel nut shells from Pits 1 and 4 (Table 2) are a significant addition to the slowly increasing number of radiocarbon determinations obtained on short-life organic material for Yorkshire Neolithic associations.

Falling in the first half of the third millennium B.C. the Hayton dates are outside the 3100-2900 cal. BC calibration plateau that obscures many of the turn of the fourth –third millennium determinations (Brindley 1999a, 30, illus. 3.4). Comparison of the Hayton determinations can be made with the dates at the Marton-le-Moor sites, in the Vale of Mowbray (Tavener and Speed in prep.) where the Woodlands Style has a date range on charred hazelnut shells of (OXA-5570) 4515+55 B.P. to (OXA-5569) 4305+55 B.P., that are within a 2 sigma range of 3200-2800 cal. B.C. (Abramson 2003, 115). A further series of determinations on charcoal for this style from Wetwang Slack (HAR-8538) 4340+140 B.P., (HAR-8539) 3470+140 B.P. and (HAR-8540) 4390+140 B.P.; and Barholme, (UB- 457) 4305+135 B.P. from Pit 4 and (UB-458) 4255+135 B.P. for Pit 13, have standard deviation ranges too wide for precise dating (Manby 1999, 68).

The dating range available from Yorkshire for both the Woodlands and Durrington Walls Styles can be compared with those obtained for Scottish Grooved Ware styles where some sites have consistently provided dates in a range beginning earlier than those obtained in Southern England (MacSween 2007, 373-74, table 33.1). For Scotland the Rinyo Style sites in Orkney have the earliest radiocarbon dates in a 3400 and 3100 cal. B.C. range (MacSween 1992, 268-89). Obscured by the calibration curve plateau, these probably represent a true date of c.3200 B.C., a century or more older than the earliest dated assemblages from the

Lab. no.	**Context/ material**	**Convention Radiocarbon Age**	**Calibrated result** (1 sigma, 68% probability)	**Calibrated result** (2 sigma, 95% probability)
Beta-223632	Pit 4, context 1781, hazelnut shell	4110+50 B.P.	2860–2810 cal. B.C. 2750–2720 cal. B.C. 2700–2580 cal. B.C.	2880–2550 cal. B.C. 2540–2490 cal. B.C.
Beta-223633	Pit 1, context 1787, hazelnut shell	4250+50 B.P.	2900–2870 cal. B.C.	2920–2860 cal. B.C. 2810–2690 cal. B.C.

Table 2: The Radiocarbon Dates

Scottish mainland (Ashmore 2004, 131). The major Woodland Style assemblages in eastern Scotland, provided by the monument complex of Balfarg Riding School, Fife, had datings on charcoal of short-life tree species from a ditch of (GU-1670) 4425+50 and (GU-1904) 4385+55 B.P., 3340-2880 cal. B.C. combined; and from a pit feature of (GU-1902) 4250+85 B.P., 3020-2620 cal. B.C. The Woodlands Style was also considered contemporary with a burning activity phase at the adjacent Balfarg henge that post-dated the pre-3300-2900 B.C. digging of that monument's ditch (Barclay and Russell-White 1993, 184). The stylistic comparisons between the extensive Balfarg Riding School assemblage and the pit groups at Hayton and Marton-le-Moor have been described above.

For Yorkshire the dating series at Marton-le-Moor (Abramson 2003) provides a chronological distinction between the Woodlands and Durrington Walls Styles where the latter's pit group assemblage dates of (OxA-5571-2) 4025+55 B.P. and 3990+55 B.P. provide a combined range of 2870-2300 cal. B.C. at 2 sigma. These compare well with the only Wolds determination for the Durrington Walls style from Burton Agnes Pit 1004 of (NZA-4695) 4160+80 B.P., 2915-2570 and (NZA-4705) 3950+70 B.P., 2625-2275 cal. B.C. (Manby 1999, 68). The emerging radiocarbon dating evidence from Yorkshire would support a Woodlands Style currency from the turn of the fourth millennium into the earlier third millennium when there was an overlap usage of the Durrington Walls Style that extended down to the middle of the millennium, if not later.

The early origin of the Grooved Ware style in northern Scotland and its usage subsequently spreading southwards is consistent with a Yorkshire dating sequence preceding in the stylistic chronology its appearance within southern England. In his recent review of the more extensive radiocarbon series available, Paul Garwood considered there to be no strong evidence prior to 3000/2900 B.C. for the Grooved Ware styles' association with southern and eastern England. There the tradition has an overall dated range of 2910-2030 B.C. at a 1 sigma range (Garwood 1999, 152-161, illus. 15.2-7). For Wessex and the Upper Thames Valley there are earlier third millennium cal. B.C. dates for the Clacton style. Those available for the Woodlands Style have a later temporal range into the middle of the third millennium B.C. and partially parallel the regional Durrington Walls Style that begins earlier in that millennium and continues down to its end (Garwood 1999, illus. 15.5-6). Specifically these southern England radiocarbon datings (Garwood 1999,157-59, illus. 15.6) provide support for his proposition that the Clacton and Woodlands assemblages are sequential developments of a single style (Cleal 1999, 2).

Acknowledgements:

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THE WORKED FLINT by Barry John Bishop

Introduction

The archaeological excavations at Burnby Lane produced a total of 69 pieces of struck flint. Of these, 49 pieces were recovered from the fills of three pits that also contained Grooved Ware pottery and which can be dated to the Later Neolithic period. The remaining 20 pieces were recovered in mostly small numbers from a variety of Iron Age or later contexts. They represent a number of flintworking traditions dating from the Mesolithic or Early Neolithic through to the Bronze Age and all are likely to have been residually deposited. The only 'late' context containing any significant quantities of material is an early Roman gully [1866], which truncated one of the Grooved Ware pits; the similarities of this material to those from the pit would strongly suggest that it was redeposited from there.

Methodology

All of the pieces were examined by eye and under x20 magnification. They were classified according to a basic typological system and their various metrical and technological attributes recorded on an MS Access database. This, along with a detailed assessment report, is included with the archive.

Condition

The assemblage as a whole is in a variable condition. The assemblages from the pits show little post-depositional damage with most pieces remaining sharp, indicating that they were incorporated into the pits shortly after manufacture and use. The material from the 'late' contexts is distinctly more abraded with over half showing some post-depositional damage, in some cases quite markedly. This would be consistent with much of it having been redeposited and 'kicked around' for some time, although notably, all of the pieces from gully [1866], which truncated a Grooved Ware pit, are in a good condition, supporting the suggestion that these were redeposited directly from the pit.

Raw Material

Two main types of raw material predominate within the overall assemblage and are the only types found within the Grooved Ware pits. The most commonly used of these is a brittle, opaque to very slightly translucent light grey to white nodular flint with a thin and rough but weathered cortex. This type of flint originates within the Wolds chalk (e.g. Henson 1985; Durden 1995) although the presence of thermal flaws suggests that the material here was obtained from glacially derived sources. The other type consists of a translucent speckled light grey or light brown flint, also occasionally retaining a thin rough cortex. This type can be found within the glacial tills present across the area and would have been easily obtainable within local alluvial deposits that have eroded from the tills (ibid.). No cores were present but the size of the flakes, which rarely exceed 50mm, suggests that the raw materials used were of small size. Both types had recorticated to some degree although this rarely concealed their colour.

Also present were a few pieces, all from 'late' contexts, of translucent black or red flint and opaque reddish-brown and greenish-brown cherty flint, these also likely to have been obtained from fluvio-glacial deposits.

Quantification

Context Type	**Flake**	**Blade**	**Burin**	**Miscellaneous retouch**	**Edge-trimmed**	**Serrated**	**Arrowhead**	**Scraper**	**Hammerstone/ ball**	**Total**
Pit 1 [1783]	5	1	0	0	0	0	0	1	0	7
Pit 1 [1787]	28	1	0	1	1	1	0	1	0	33
Pit 2 [2064]	5	0	0	0	0	0	1	0	0	6
Pit 3 [2163]	3	0	0	0	0	0	0	0	0	3
Grooved Ware Pits Total	**41**	**2**	**0**	**1**	**1**	**1**	**1**	**2**	**0**	**49**
Later Contexts	11	4	1	2	0	0	1	0	1	20
Totals	**52**	**6**	**1**	**3**	**1**	**1**	**2**	**2**	**1**	**69**

Table 3: Quantification by type and context

Typology, Technology and Dating

The lithic material recovered from the site can be most profitably considered as forming two distinct groups; the material from the Grooved Ware pits and gully [1866], and the assemblages from the remaining 'late' contexts. The distinction between these groups was not merely one of context but they also reflect differences in technological strategies and raw material use.

The Grooved Ware Pits

The Grooved Ware pits produced the largest quantity of struck flint from the excavations, most of which consists of unusable trimming flakes, small flake fragments, cortical flakes, miss-hits and other knapping waste. There are several useable flakes present, a very high proportion of which had either been retouched or show evidence of utilisation. The material represents two distinct reduction strategies, more or less reflecting the use of the two different raw materials used. One of the grey-brown flint flakes represents a mis-strike of a Levallois-type core. It appears not to have been struck with sufficient force, causing the fracture to plunge through the back of the core, thus preserving the core's 'keeled' edges and part of a secondary striking platform at its distal end (Fig. 6: 7). Many of the other grey-brown flakes also appear to have been produced using the Levallois technique, these exhibiting heavily edge-trimmed platform/face edges, acute and facetted striking platforms, and multi-directional dorsal scars. Conversely, the matt grey-white flakes appear mostly to be the products of more typical single or double platformed flake cores. These generally are narrow and thin with narrow and trimmed striking platforms and uni-directional dorsal scars. One flake from context [1787] preserved remnants of a platform aligned at a right angle near its distal termination, although this would appear to be more of a fortuitous survival rather than an attempt to rejuvenate its core. The reduction strategy was evidently careful and considered, but no systematic blade production was attempted.

Six retouched pieces came from the Grooved Ware pits, representing over 12% of the assemblages from these features. One of the most distinctive pieces is the leaf-shaped arrowhead from pit 2. This is a slightly abraded but nearly complete ogival form of Green's (1980) type 3B (Fig. 6: 1). It was manufactured from a shiny grey-white flint and had pressure flaking extending over most, but not all, of its faces. Such arrowheads are traditionally considered to be characteristic of Early Neolithic assemblages. Green (1980, 94-97) has argued for their continuity into the Early Bronze Age, although Saville (1980, 154) has pointed out that the overwhelming majority of securely contexted leaf-shaped arrowheads have Early-Middle Neolithic associations, these thus pre-dating the use of Grooved Ware. Whether or not the currency of leaf-shaped arrowheads overlapped with the use of Grooved Ware, there are very few direct associations, and at pure Grooved Ware sites where they are present, they are massively outnumbered by transverse forms (e.g. Green 1980, 108 and table V.1). The example here is abraded and of a different raw material to the other pieces within the pit. Given the presence of earlier flintwork at the site, including other arrowheads, the most probable explanations would be that the arrowhead was either residually incorporated into the pit or, perhaps less likely, represents an exotic and antique item purposefully deposited by the Grooved Ware users.

The other retouched implements from the Grooved Ware pits consist of two scrapers, one a typical short-end type (Fig. 6: 6) and the other, also from the same

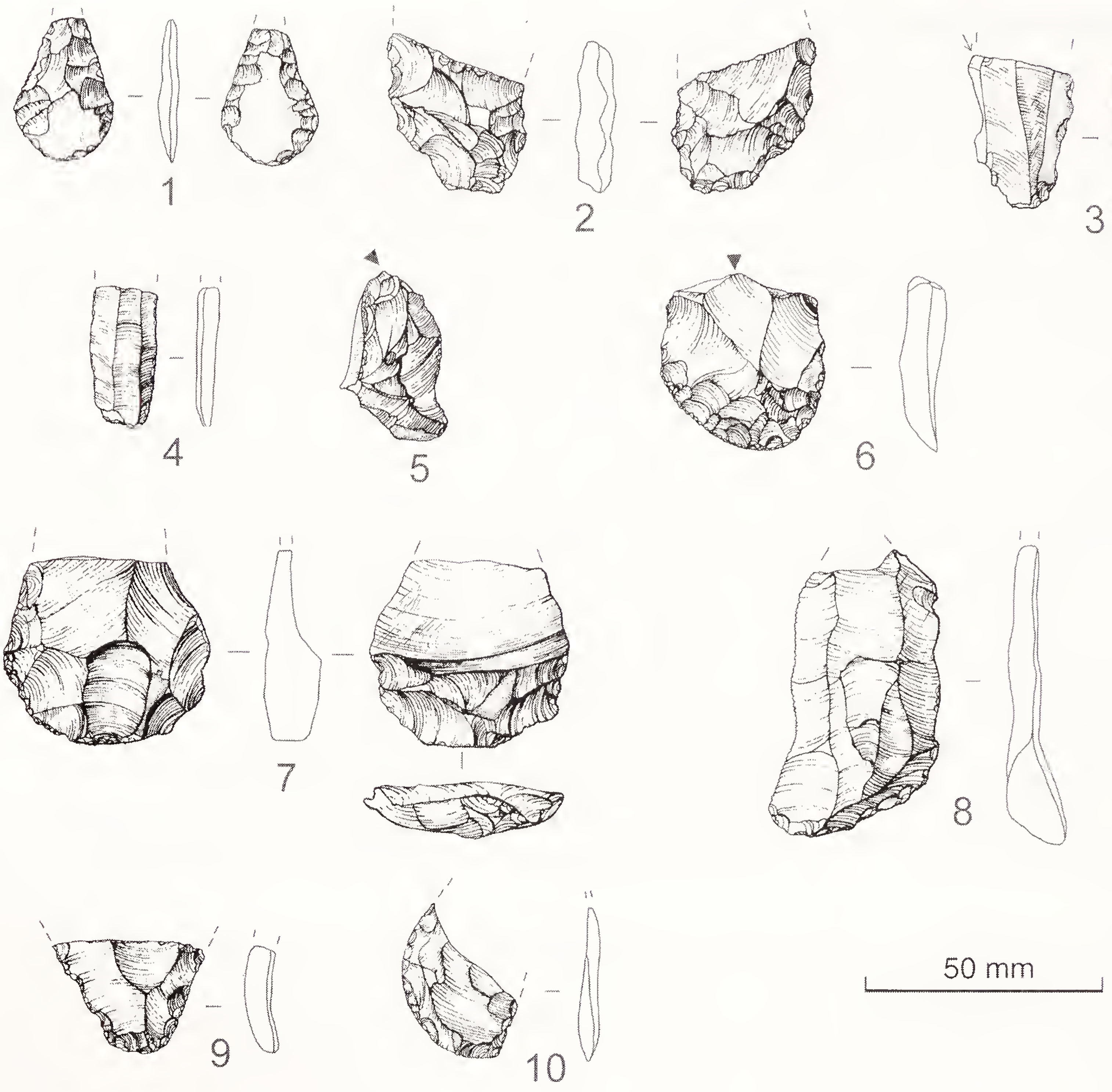

Fig. 6: Worked Flint (Scale 1:2)

context, a horseshoe-shaped primary flake with minimal retouching to its distal edge but with some edge-wear indicating that it had been used as a scraping tool. Also present is a matt grey-white serrated flake with c.10 notches per cm cut along its slightly convex right margin (Fig. 6: 8). It also exhibits some blunting around its distal, possibly a device to aid handling or hafting. It is slightly worn but shows no evidence of 'silica polish' along its working edge. The other retouched pieces from the Grooved Ware pits consist of a thin, broken grey-brown flake with very fine, arced, semi-invasive retouch around all surviving edges, possibly a delicate cutting tool (Fig. 6: 10) and the broken distal end of a matt grey-white flake with fine scalar retouch around all of its surviving margins (Fig. 6: 9). This may be a minimally retouched plano-convex knife or possibly the hafting element of another tool. In addition to the retouched items, the Grooved Ware pits produced four flakes that exhibit convincing traces of utilisation and a further utilised flake was recovered from gully [1866], which probably originates from the pits. Four exhibited evidence of regular micro-chipping and/or edge rounding/polishing consistent with being utilised as fine cutting implements and the remainder had wear and damage patterns consistent with use as a piercing-type tool (cf Tringham *et al.* 1974).

In addition to the retouched implements, several small and very thin flakes, all of grey-brown flint, were recovered from the Grooved Ware pit 1, these consisting of thinning or finishing flakes produced by pressure flaking. At least three of these retain patches of polish on their dorsal surfaces and were evidently struck from a polished implement that had been resharpened or otherwise reworked, although they were all too small to suggest what type of polished implement it was.

In addition to the struck flint is a single broken cobble of burnt chalk weighing 280g recovered from the fill of a ditch that truncated a Neolithic pit. This has been smoothed and exhibits several randomly aligned incised scratches on its surface. Although modified by being burnt, it is uncertain if the rounding and the scratch marks were purposefully executed.

Discussion of the Neolithic Pit Assemblages

Two main types of activity are represented amongst the material from the Grooved Ware pits; waste from knapping and/or tool production, and discarded tools, although the very small quantities involved would suggest that the material represents the deposition of only selected elements from the flintworking sequence.

The material represents at least two different technological reduction strategies. The use of the Levallois technique has been documented throughout Britain but it would appear to be particularly associated with Grooved Ware contexts and with particular regions, including parts of Wessex, the Thames Valley and coastal Yorkshire (Edmonds 1995, 100). The technique was often employed in the production of prestigious implements, including certain types of knives and arrowheads, and again, these often have specific Grooved Ware associations. Also demonstrating a concern with prestigious tool use were the thinning flakes removed from a polished implement. These may suggest that the implement was being repaired, although in other Grooved Ware contexts polished axes have sometimes been 'ritually decommissioned' through flaking or being burnt, prior to final deposition (eg Cooper and Hunt 2005).

The assemblages from the Grooved Ware pits are technologically homogeneous although they contained disparate quantities of lithic material. Pit [1784] produced 33 pieces in its primary fill and seven in its upper fill, with no struck flint present within its middle fill, recalling the situation of a Grooved Ware pit at Yeavering in Northumbria (Hope-Taylor 1977, 348-351). Nevertheless, the presence of thinning flakes exhibiting traces of polish in both its primary and upper fills indicates that the initial and final phases of its infilling were complementary. Pits 2 and 3 contained six and three pieces respectively in their single fills, whilst pit 4 contained no lithic material at all.

Aspects of the Grooved Ware pit assemblages, including its selectivity, the high proportions and the varied range of retouched implements, the small quantities of knapping waste, the use of the Levallois technique and indications of the working of a polished implement, are all features commonly observed among lithic assemblages associated with Grooved Ware contexts. The assemblages do not necessarily represent casually discarded flint working waste but they may have been specifically selected and implicated in significant and meaningful depositional practices, as have been documented from many comparable sites throughout Britain (eg Cleal and McSween 1999; Thomas 1999; Harding 2006).

The 'Late' Contexts

The bulk of the struck flint from the Iron Age or later contexts consists of a further distinct industry to those evidenced from the pits. This was predominantly blade-based, with systematically produced blades contributing 20% of the assemblages from these features. A larger blade, measuring nearly 80mm in length, was recovered from context [1747]; however, this piece was so chipped and abraded that a natural origin for the piece could not be excluded. Complementing these was a transverse blade-core rejuvenation flake of translucent black flint (Fig. 6: 5). This had removed the edge and part of the face of a core in order to rectify a series of hinge and step fractures. Retouched implements from the 'late' contexts include the tip of another arrowhead, manufactured from an opaque grey flint. From the tip alone it cannot be conclusively demonstrated whether this was a leaf-shaped or a barbed and tanged type, although the former seems preferable. In addition, a miscellaneous retouched piece consists of a bifacially flaked translucent black implement that had broken transversely, possibly during its manufacture (Fig. 6: 2). Its shape, size and the techniques of its manufacture strongly suggest that this is an unfinished arrowhead roughout. The remaining two retouched implements from the 'late' contexts consist of a burin made on a blade-like flake, the blow executed on the break of a blade-like flake (Fig. 6: 3), and a small truncated-blade (Fig. 6: 4).

A few of the other pieces from the 'late' contexts were rather cruder in their production, mostly consisting of short squat and thick flakes.

Discussion of the Assemblages from the 'Late' Contexts

The majority of the pieces from the 'late' contexts consist of narrow blades and blade-like flakes produced using a careful and systematic reduction technique, characteristic of Mesolithic or Early Neolithic industries. Supporting such a date are the arrowheads, the burin, the truncated blade and a transverse core rejuvenation flake. They indicate activity at the site pre-dating that of the Grooved Ware users and that the site was a focus for human activity since at least the Early Neolithic and perhaps earlier, although the low number of pieces and the predominance of arrowheads would suggest that it was not extensively occupied, but more likely a short-stay hunting and/or tool repair location.

A few other pieces from 'late' contexts, all recovered from Roman or later contexts, are more crudely produced. These pieces are possibly more characteristic of Middle Bronze Age or later industries although there are far too few to be confident of any such identification. Although some very limited Iron Age flintworking at the site cannot be entirely ruled out, there was no indication that any flintworking was occurring at this time, and it certainly does not appear to have been an important or significant aspect of the activities there. The only lithic find that may be associated with the later occupation of the site was the flint ball from a Roman ditch fill [710]. It consists of a nearly spherical cobble between 61mm and 65mm in diameter that weighs 345g. It surface was entirely covered with incipient Hertzian cones and other evidence of prolonged battering. Such items are often described as hammerstones although its near sphericality and the regularity and extent of the battering over its surface suggests that it was deliberately fashioned and may have had a different function. Similar spherical flint balls were recovered from Bronze Age and Iron Age contexts at Redgate Hill in Hunstanton, Norfolk (Healy *et al.* 1993, 33, fig 36 L40); described as 'hammerstones' or rubbers, it was suggested that they may have been dressed and more suitable for grinding than flint working (re Wymer 1986, 26). Alternatively, of course, the ball may have had a non-utilitarian function, and balls of various materials have been recovered from a variety of different contexts, including Grooved Ware, throughout Britain.

The animal bones identified by Deborah Jaques

Context	Species	Common name	Skeletal element	Isolated tooth wear	Fragment count	Side
Pit 1 (1783)	Bos f. domestic	cattle	metatarsal		1	r
Pit 1 (1787)	Bos f. domestic	cattle	calcaneum		1	l
Pit 1 (1787)	Bos f. domestic	cattle	DP4	J	1	
Pit 1 (1787)	Bos f. domestic	cattle	M1/M2	G	1	
Pit 1 (1787)	Bos f. domestic	cattle	M1/M2	C	1	

Table 4: The animal bone by context

The palaeobotanical material identified by Jacqui Huntley

Following the 1999 excavation season the bulk samples were taken during the excavation and processed on-site with at least flot retained at 500m mesh. In the laboratory a selection of the larger flots was examined at magnifications of up to x50 and notes made of the size, the matrix components and the numbers and broad types of plant remains. The following summarizes the material recorded in the contexts scanned.

Context	Samples	Notes
Pit 1 (1783)	195M; 180M; 73; 73M	Scraps of charcoal, modern roots, snail shells and mineral. Occasional calcined bone. 1 *Triticum cf. aestivum* grain
Pit 1 (1786)	181 M	Small – mineral and silt, shell and a few bone fragments. Very occasional calcined bone, a little cindery charcoal. 2 Cereal indeterminate, 1 undifferentiated barley, 1 wheat glume .
Pit 1 (1787)	204	Flaky charcoal – mixed species. Occasional shells, calcined bone, very occasional small mammal bone. Charcoal clean and sharp flakes. 20ml scanned and no seeds. One hazelnut fragment.
Pit 4 (1781)	221	Small pieces flaky fragile charcoal. A few shell fragments.
Pit 4 (1780)	52	Small pieces of flaky charcoal and mineral. V. occasional shells and fragments of calcined bone. 1 indeterminate cereal, 1 barley indeterminate.

Table 5: Description of Neolithic samples scanned and assessed.

Summary of hazelnut shell by Rachel Ballantyne

In 2006 further material from the flotation were examined in order to identify material for radiocarbon dating. The following pre-sorted bags of charcoal were scanned under a low-power microscope (x6 - x40). All plant macro-fossils and other artefacts are summarized in Table 6. The samples submitted were pre-sorted charcoal stored within 'poly-grip' plastic bags. The hazelnut shell had been collected and stored with wood charcoal from the same sample, so sharing of carbon dust will have occurred. Many of the nutshell fragments also have patches of clay with fine sand upon their surfaces.

The one cereal grain is heavily charred and porous, and can only be identified as barley or wheat (*Hordeum/Triticum* sp.). There are frequent low amounts of charred hazelnut shell fragments (*Corylus avellana*), which are characteristic of later prehistoric assemblages in Britain. The eight samples containing hazelnut shells were sorted under a low-power binocular microscope, using freshly cleaned (distilled water, then air-dried) tweezers and Petri-dishes and the charred hazelnut shell fragments recorded before dispatch for radiocarbon dating.

Context	**Sample**	**Number of hazelnut shell fragments**	**Grain**	**Pot/Burnt clay**	**Burnt bone**
Pit 1 (1783)	<196>	3		-	
Pit 1 (1786)	<54>	1			
Pit 1 (1786)	<183>	3			
Pit 1 (1787)	<144>	11		++	
Pit 1 (1787)	<184>	3		+	-
Pit 1 (1787)	<204>	11		-	-
Pit 1 (1787)	<205>	8		+	
Pit 4 (1774)	<42>			+	
Pit 4 (1781)	<221>	10			
Pit 4 (1781)	<57>		1		

Table 6: Summary of all plant macro-fossils and other artefacts
Key for fragmented remains: '-' 1 or 2 items, '+' <10 items, '++' 10-50 items

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THE DRUIDS' ALTAR: A 'SCOTTISH' STONE CIRCLE IN CRAVEN, NORTH YORKSHIRE

By R. Martlew

A topographical and geophysical survey of the Druids' Altar was carried out for the Yorkshire Dales National Park Authority in 2007. Several different interpretations of the site have been put forward in the past; the surveys identified additional evidence to support its identification as a Bronze Age Four Poster stone circle, including an outlying stone not previously recorded. A detailed examination of the horizon and view from the site suggest a deliberate choice of location, from which midwinter sunset and the southernmost setting of the moon coincide with prominent horizon features.

DESCRIPTION AND HISTORY

The Druids' Altar (SD 94944 65271) is located in the township of Threshfield, alongside the boundary with Bordley township in the limestone uplands of Craven, North Yorkshire (Fig. 1). Its proximity to Bordley has resulted in the name 'Bordley Circle' being frequently used, as in the description by Raistrick (1929, 356). The term 'altar' refers to a trilithon setting, for which there is no evidence other than hearsay. In 1878 a local guide book merely used the name 'Druids' Circle' (Thompson 1878, 33). The name appears with alternative punctuation depending on the number of druids thought to have been involved: in this paper the genitive plural is used.

Descriptions of the site over the last two centuries have created a degree of confusion. In 1892 Speight recorded a 'round stone and earth mound about 150 feet in circumference and 3 feet high, ... formerly surrounded by a circle of upright stones, only three of which are now left standing.' (Speight 1892, 323). Raistrick, thirty-seven years later, describes a 'circular bank, 50 feet diameter, about 9 feet wide, and 3 feet high, originally set with upright stones. All the stones but three have been removed...'. In 1970 the site was included by S.W. Feather in a discussion of Pennine chambered tombs as a possible example. The interpretation of a crescentic forecourt leading to a chamber is supported by 'a standing stone... on the eastern side of the forecourt' and two stone slabs set on edge forming the eastern side of the gallery (Feather and Manby 1970, 397). The most recent description of the site was published by Aubrey Burl with the words 'Its much robbed mound and displaced stone have led to its interpretation as the open forecourt of a chambered tomb. It is not. It is a 4-Poster.' (Burl 1988, 73). It was partly to investigate these different views, and the implications of identifying the site as a Four-Poster stone circle, that the present survey was undertaken.

The site today comprises three standing stones set close together on top of a mound, with a prostrate stone lying between them. A second prostrate stone lies

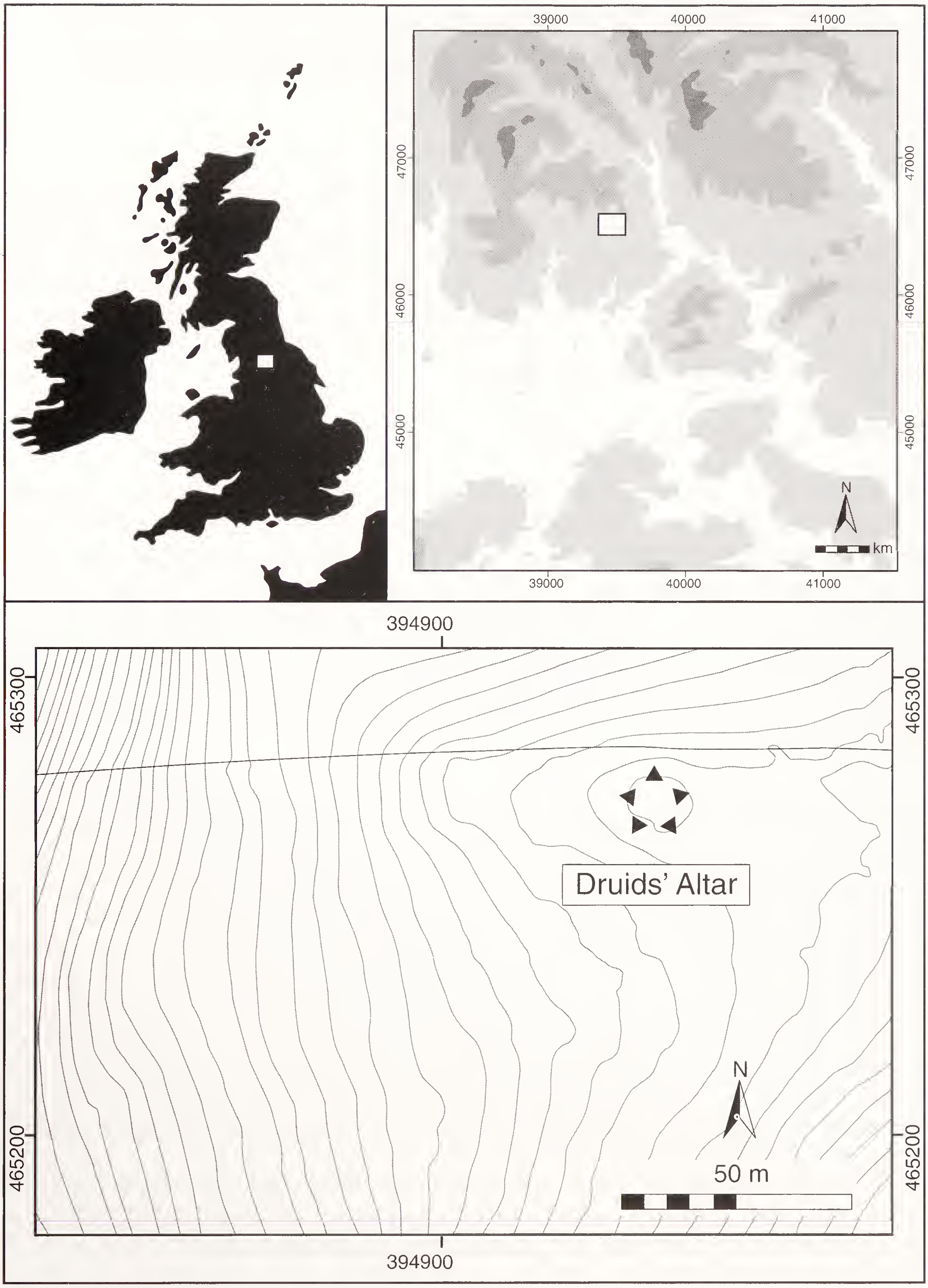

Fig. 1: Location of the Druids' Altar. Contours at 0.5 m intervals below 376m OD.

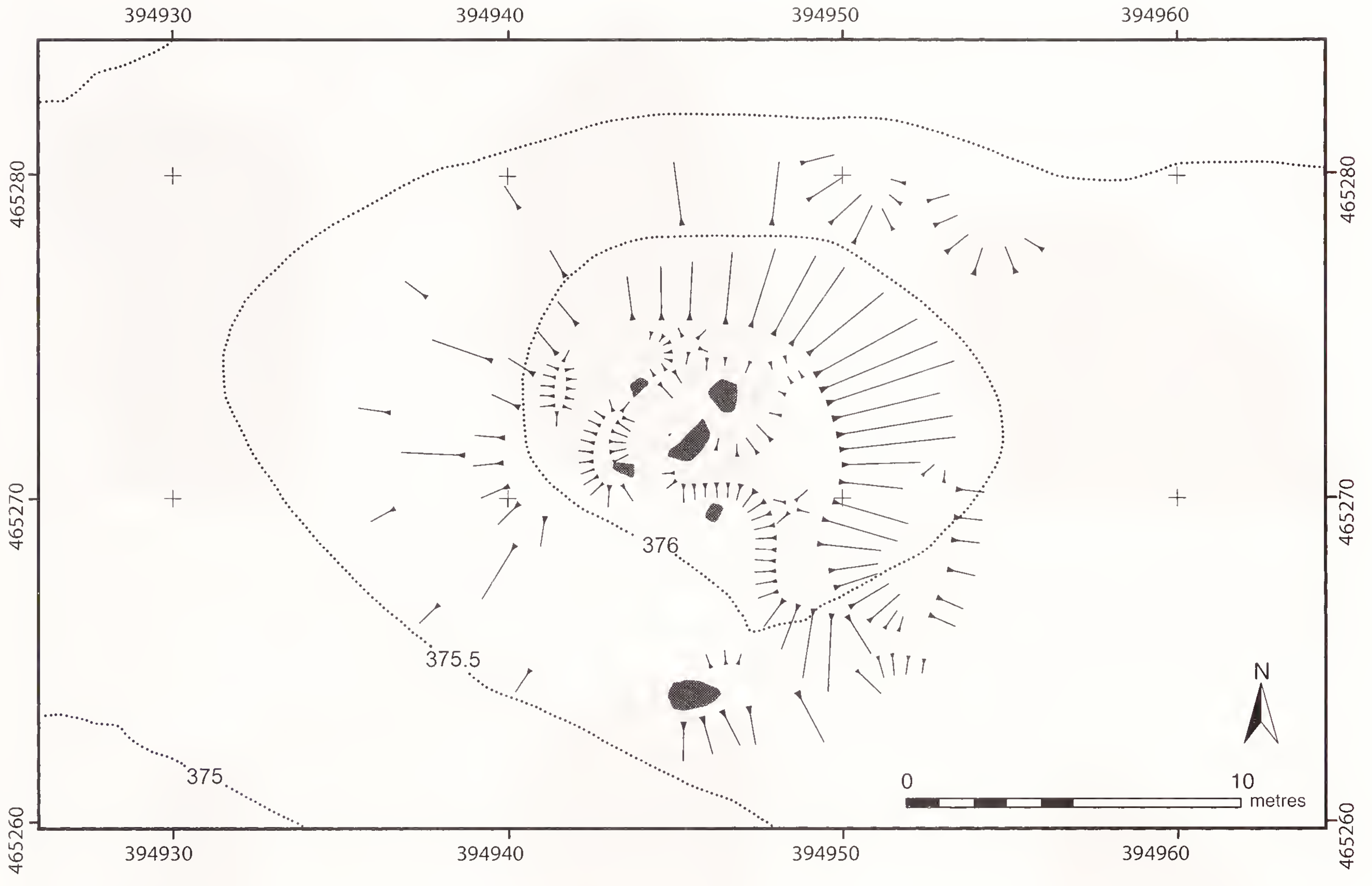

Fig. 2: Plan of the Druids' Altar.

on the southern edge of the mound (Fig. 2). The stones range from 0.7 m to 1.3 m in height above present ground level, the north-east stone being the lowest and slab-like while the other two standing stones are pillars, roughly square in cross-section (Fig. 3); it is not possible to determine the cross-section of the fallen stone, which lies buried to its upper surface, but on this visible side it is 1.6 m in length. The tallest standing stone is at the south-east, and erosion through trampling by stock has exposed it almost to its base on the southern side. A small flat-topped block, triangular in plan and about 0.5 m maximum width, is just visible above ground level on the south-west of the setting. The only other stones in the immediate area are rounded cobbles that have been exposed around the south-east standing stone. The second prostrate stone, some 5 m to the south of the main setting, measures 1.7 m in length and has a pronounced keel on its western end.

The mound in which the standing stones are set may itself be sitting on a slight platform about 15 m in diameter, but the extent of damage to the site makes it very difficult to identify this except around the southern and western sides. The topographical survey recorded the many undulations in the top of the mound and the indentation on the southern side that had suggested a crescentic forecourt. It appears that trenches have been driven in towards the centre from the south, north and north-east. The central area, between the standing stones, is some 0.15 – 0.20 m below the highest point of the mound, and the prostrate stone is clearly

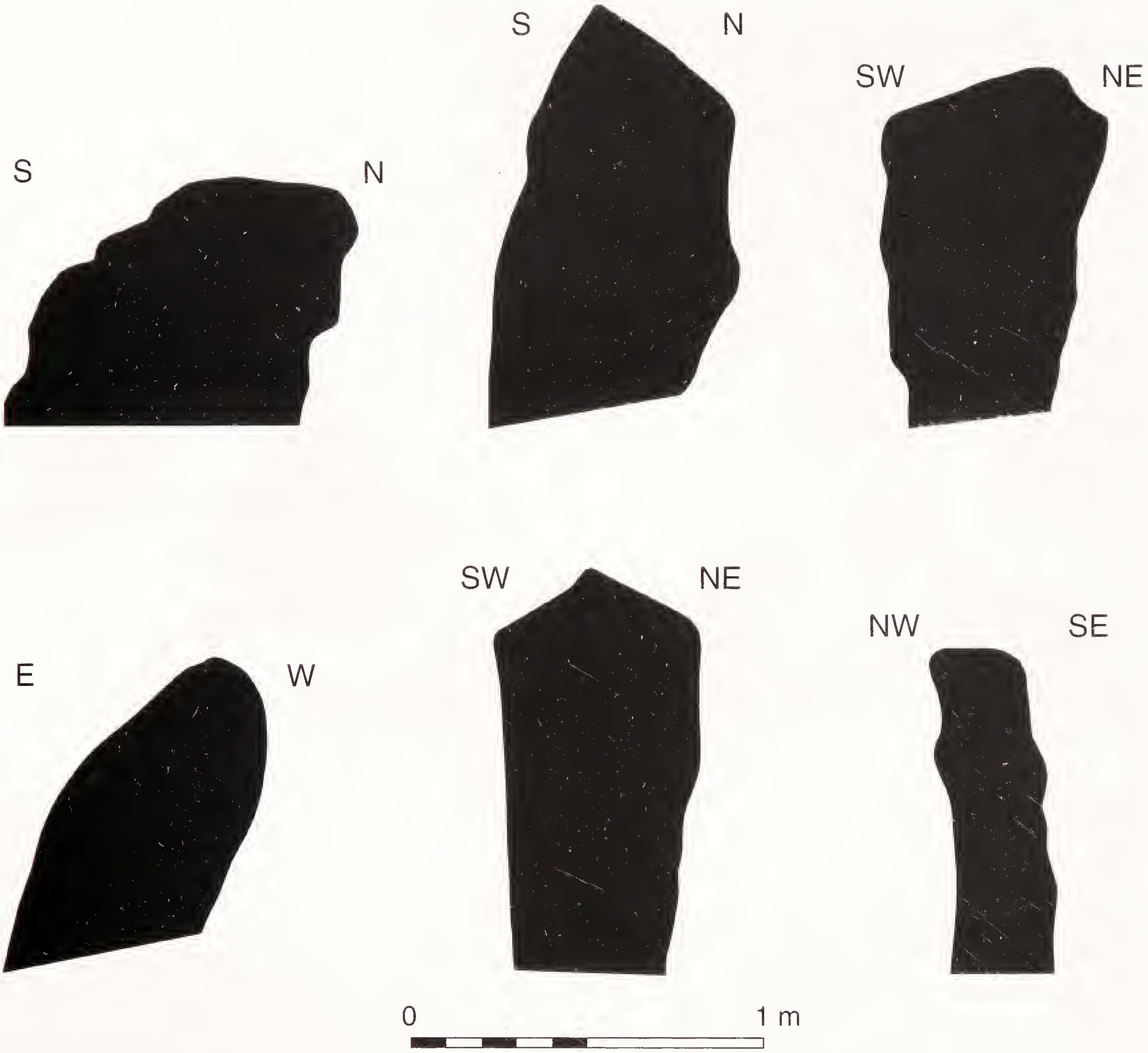

Fig. 3: Profiles of the standing stones at the Druids' Altar.

lying deeper than this. The disturbance may have resulted from a combination of robbing for walling-stone and antiquarian investigation, and has been exacerbated in recent years by stock using the stones as rubbing-posts. The extent of all this activity makes it difficult to substantiate the suggestion that the monument is a chambered tomb. Much of the disturbance may have taken place in the thirty-seven years between the descriptions by Speight and Raistrick, turning the mound reported by the former into the circular bank described by the latter.

Approximately 40m to the west, and previously unrecorded, are the slight and indistinct remains of a second mound. It is lower and less regular, and has also suffered from the construction of the adjacent stone wall. It does, however, suggest an artificial enhancement at the end of the natural east-west ridge on which both mounds are located.

RECENT INVESTIGATION

In 2007 The Yorkshire Dales Landscape Research Trust was commissioned to carry out a detailed survey of the site by the Yorkshire Dales National Park Authority, in advance of consolidation work. The Trust organised a series of complementary evening classes at Craven College in Skipton, and involved members of the local community in the survey work. Details of the surveys are contained in a report submitted to the National Park in February 2008, and the results are summarised here with an extended discussion.

Geophysical Survey

Earth resistance and gradiometer surveys were carried out over an area 80 m east-west by 60 m north-south, including the low mound to the west of the Druids' Altar (Fig. 4). The resistance survey gave the clearest results, although the thin soils allow considerable background interference from the underlying bedrock. This is a particular problem on limestone, where sub-surface erosion can produce regular patterns in the bedrock surface on a similar scale to archaeological features. The resistance plot shows the main site as an oval-shaped low resistance anomaly (A), running south-west to north-east across the trend of the local topography. Around the south-western end it corresponds roughly to the outer limits of the platform that was recorded on the surface. The north-eastern end of the oval has been disturbed by the construction of the stone wall, and nothing is clearly visible on the surface apart from a few small quarry scoops.

The resistance plot also shows a band defining a shorter oval that crosses this anomaly to the south of the stone wall (B). This band appears to join and enclose at least two lower resistance anomalies (C). Although this may relate to natural jointing in the bedrock, it could represent a stone bank surrounding the mound in between holes that once held larger stones. This would tie in with Speight's description of the site in 1892, which states that the stone circle 'surrounded' the mound, but it can only be confirmed by excavation. The mound on which the stones are set appears on the plot as a circular area of mid-range resistance. The pattern of anomalies within this appears to reflect areas of disturbance visible on the surface, with the higher resistance indicating surviving cairn material.

The resistance survey clearly shows the adjacent low mound to the west as a contrasting high anomaly, within which there is a circular band of lower resistance (D). A small anomaly on the western side of this ring (E) corresponds to the only significant response detected by the gradiometer survey over the whole area, and requires further investigation to determine its significance.

The geophysical survey therefore has produced evidence that might support the earliest detailed description of the site, as a mound surrounded by a stone setting. The implication of Speight's account is that the three surviving stones are part of

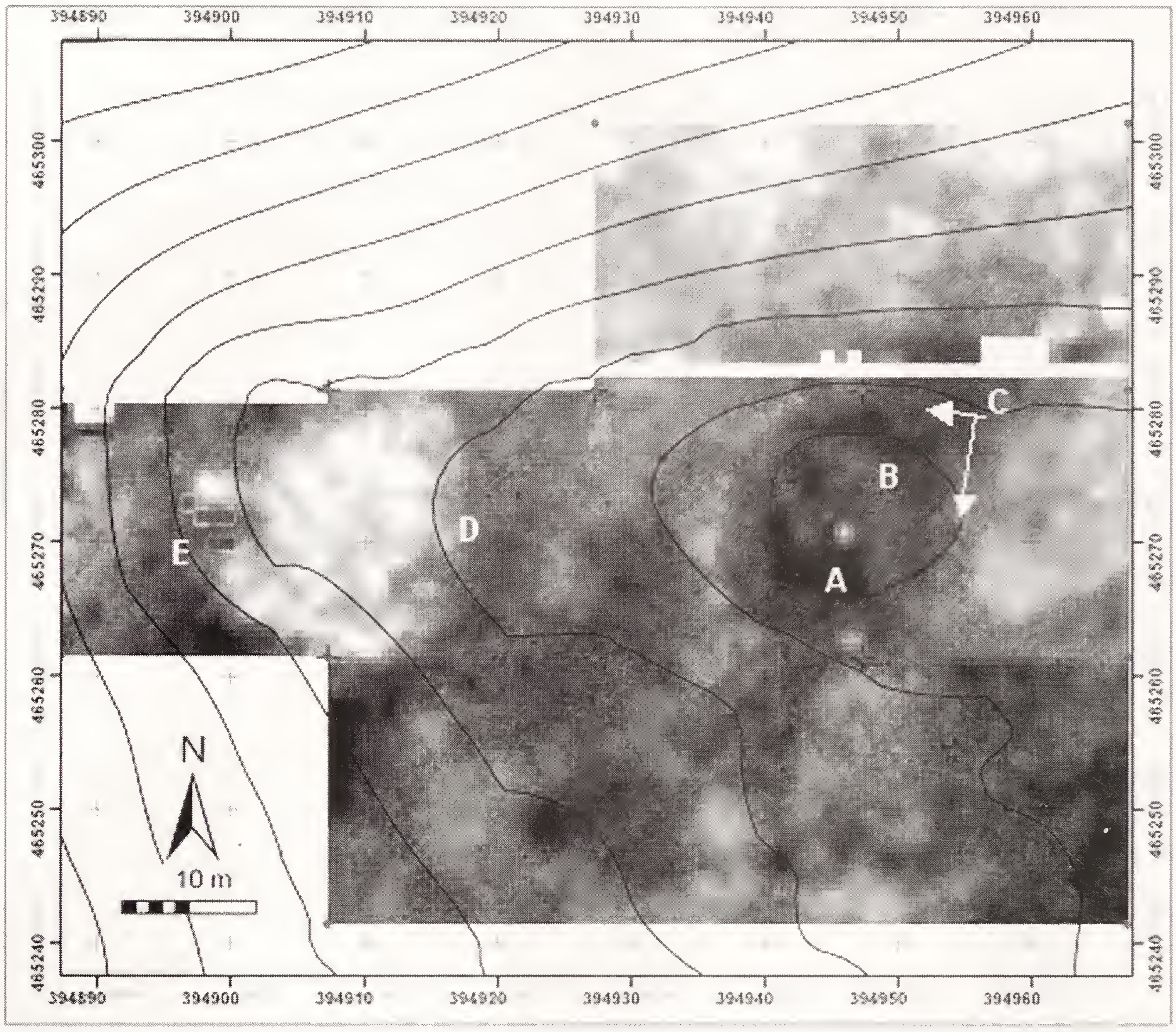

Fig. 4: Results of the geophysical survey.

this setting, but this, along with the reputed altar trilithon, is open to question. The evidence suggests considerable damage to the mound by trenching between the stones, and supports the interpretation of the Druids' Altar as a Four-Poster stone circle rather than a chambered tomb. There appears to be a ring ditch cut into the mound to the west of the site, but any further interpretation of this feature and the magnetic anomaly would require closer investigation.

Analysis of location and potential astronomical alignments

Burl (1988, 73) notes that the Druids' Altar stands 'at the edge of a terrace from which the land falls steeply to the west'. The present survey has considered this in more detail, and extended the analysis of the site's location to include the horizon as viewed from the centre of the stone setting.

The two mounds are situated on the end of a low east-west ridge, overlooking a steep-sided dry valley to the west (Fig. 1). The pasture immediately around the site is free of stones, but large earthfast boulders are scattered across the fields within and on the opposite side of the valley. It is a striking feature of the location of the Druids' Altar that a distant view to the horizon occurs in a restricted direction towards the south, as shown by the viewshed analysis in Fig. 5. Based on a digital terrain model of the surrounding landscape, the analysis (kindly undertaken by Dr Andy Evans of the University of Leeds) shows areas that are likely to be visible to an observer standing between the stones of the Druids' Altar, in the absence of any restrictions due to vegetation or the weather. The areas highlighted on the

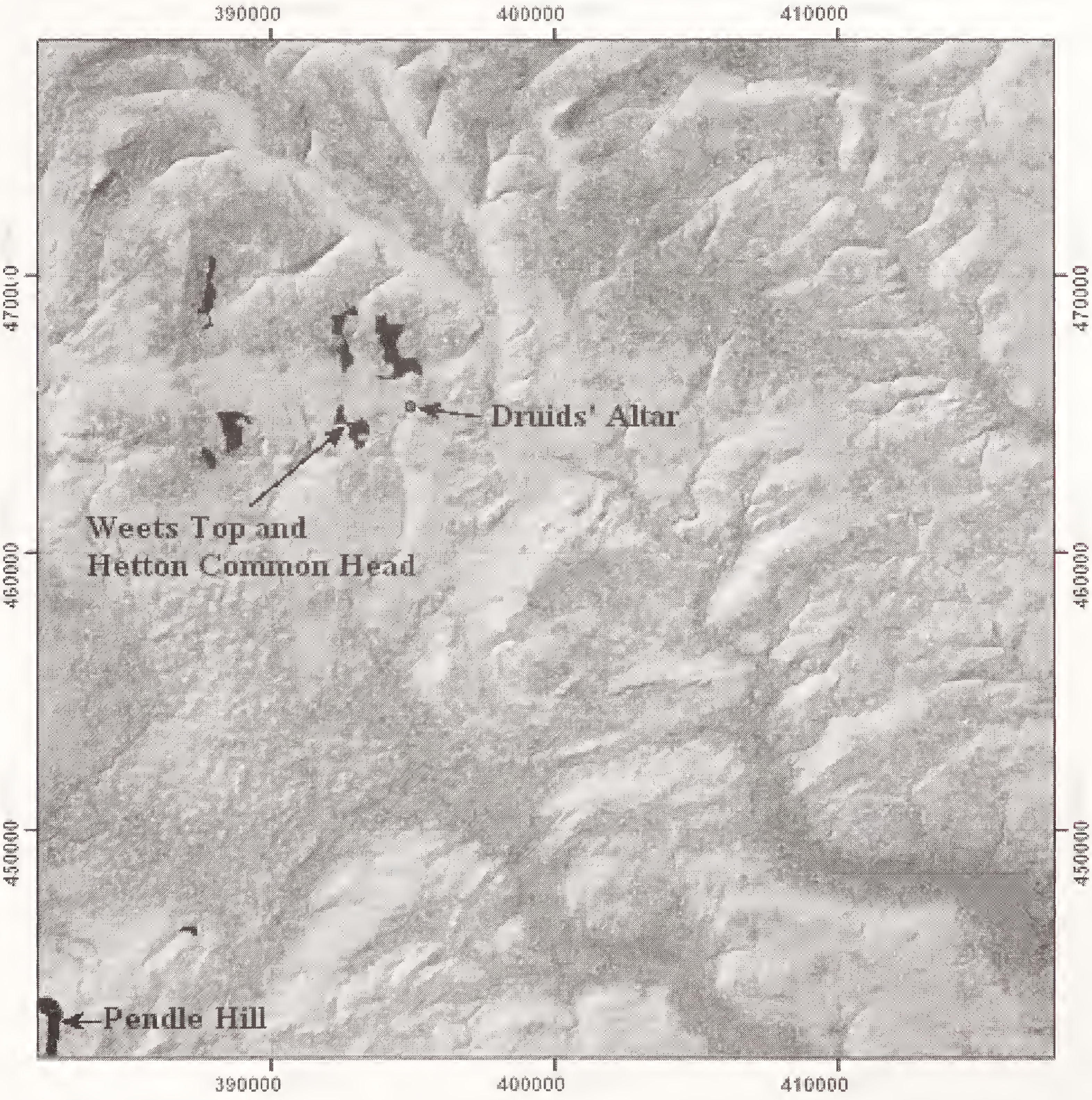

Fig. 5: Viewshed analysis of digital terrain data showing main areas visible from the Druids' Altar, including Pendle Hill in the south-west corner and the high ground of Hetton Common Head and Weets Top closer to the site. The terrain data are relatively coarse, but indicate that the stone circle would have to be built in open ground for these views to be achieved.

diagram are as high or higher than the observation point, and so indicate the distance from the site to landscape features that create its horizon view.

A detailed survey of these features was carried out from an approximately central point between the stones (SD 94944.818 65271.915; 375.75 m OD) to investigate whether this phenomenon has any significance in terms of astronomical events such as the rising and setting positions of the sun and moon. The section showing the southern horizon (Fig. 6a) demonstrates how the relatively high and close horizon dips towards a distant, low segment between 185 and 215 degrees (all azimuths are from True North). The view is across the gently sloping foreground to where the land suddenly drops away at the end of the dry valley. At the western end of this distant horizon segment is the prominent hump of Pendle Hill, rising to 557m OD at a distance of 17 miles. In a landscape of long slopes and rounded hills rather than sharp mountain peaks the view dramatically emphasises Pendle's steep eastern face. This distant view disappears within fifty or sixty metres either side of the standing stones. To the west of Pendle Hill the horizon is much closer, and climbs slightly to the twin peaks of Hetton Common Head (SD 927628, 405 m) and Weets Top (SD 926632, 411 m), just over 3 km from the Druids' Altar. Although not impressive in terms of altitude, the view to these hill-tops is enhanced by the deep dry valley in the foreground.

The southernmost setting positions of the sun and moon in 2000 BC (Ruggles 1999, 57) are shown against this horizon in Fig. 6b. The midwinter sun sets in the col between Hetton Common Head and Weets Top, and the moon at its lowest in the southern sky will be seen setting behind the distinctive bulk of Pendle Hill. Whatever the interpretation of the site itself, the Druids' Altar is positioned within a very restricted area from which both of these phenomena can be seen.

DISCUSSION

Morphology and classification

The title of this paper echoes Aubrey Burl's report on two sites in Northumberland that he identified as Four Poster stone circles, outliers from a significant concentration of similar sites in eastern Scotland (Burl 1971). In his comprehensive catalogue of known Four Posters he included the Druids' Altar as the one 'certain' example in Yorkshire, with only two any farther south in England and more distant from the main group of twenty-nine sites in Perthshire (Burl 1988, 72-3 and Fig. 1). In considering the Druids' Altar, Burl interprets the prostrate stone that now lies near the centre of the site as the original fourth member of the setting, broken from the flat triangular block that would mark the south west corner. This potential reconstruction would place the highest stone at the south-west, diagonally opposite the lowest at the north-east – a feature that Burl identifies as a 'vital attribute' of Four Posters (*ibid.*, 13). The three standing stones mark two sides of a rectangle 2.8 m by 3.6 m, but they also stand on a circle approximately 4.5 m in diameter. This derivation of a rectangular setting from four points on a circle is a common trait shared with thirty six other sites of this type. The proposed broken stump lies a mere 0.5 m inside this circle, which could easily result from the disturbance to the mound and the collapse of the monolith. The dimensions of the rectangle give an enclosed area of 10.08 sq m, placing the Druids' Altar at the smaller end of the standard size range. This is consistent with the inverse relationship between size and distance from the main concentration noted by Burl.

About a quarter of the Four Posters in Burl's catalogue are set on mounds, but the lack of recent excavation makes it impossible to determine how common a surrounding bank may have been. Sixteen Four Posters are laid out on or close to the cardinal points of the compass, and an outlying stone has been identified at seventeen sites. If originally erected in its present position, the prostrate stone on the edge of the mound at the Druids' Altar would have extended the north-south alignment of the easternmost pair of standing stones.

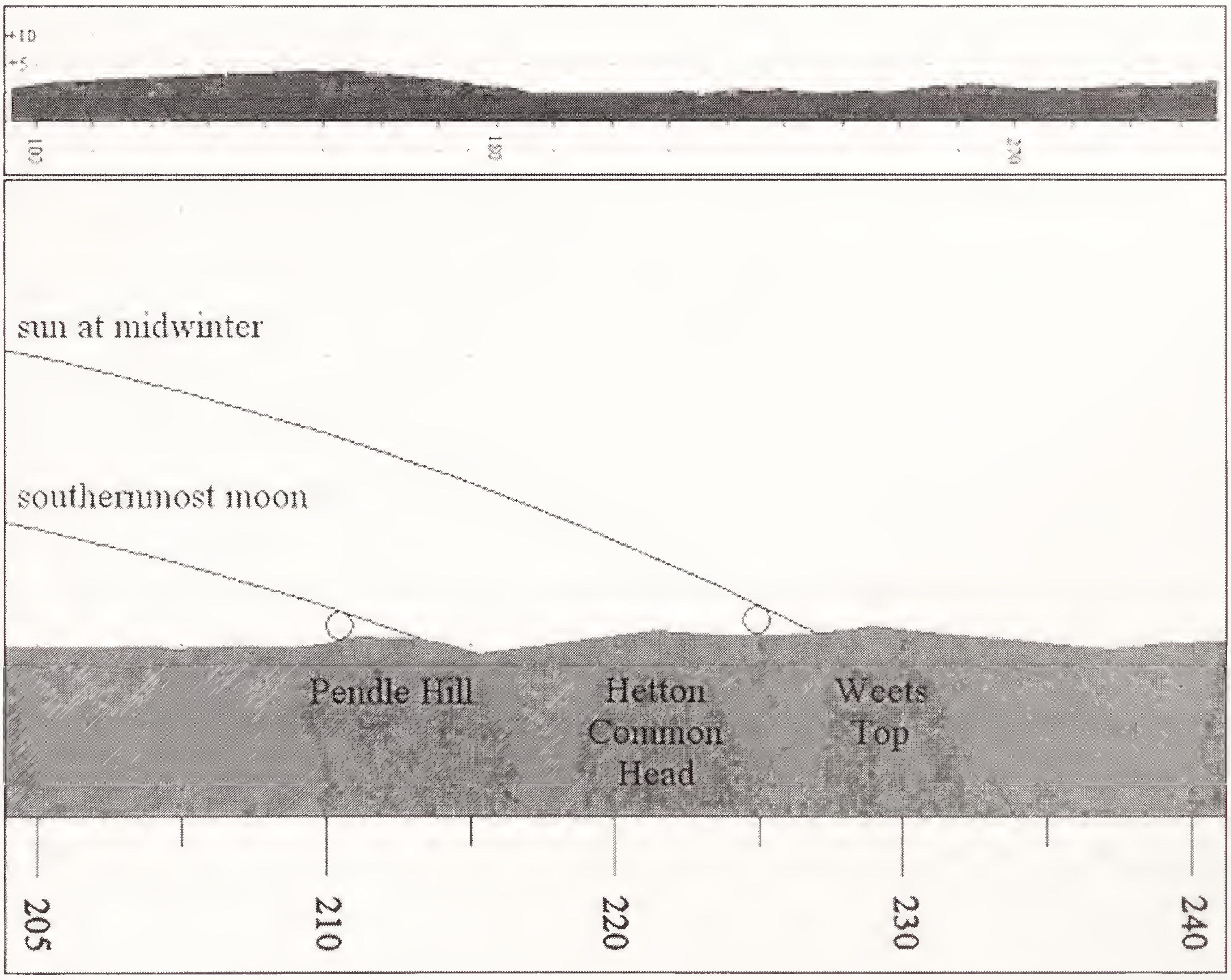

Fig. 6(a): The southern horizon plotted as altitude relative to a viewpoint between the stones at the Druids' Altar. The most distant segment is to the west of true south, from 185 to 215 degrees.
Fig. 6(b): Detail of the south-western horizon, with Pendle Hill at the junction between far- and middle-distance views. The arcs indicate the declination of the upper limb of the southernmost moon (-29.7 deg.) and the midwinter sun (-23.7 deg.) in 2000 BC.

Wider significance of the site

Since its emphatic identification by Aubrey Burl there has been little discussion of the significance of the Druids' Altar as a distant outlier from the concentration of Four Poster stone circles in eastern Scotland. The site bears a close resemblance to one of the few excavated examples at Lundin Farm South East (Stewart 1966), including the presence of a surrounding bank as suggested by the resistance survey, the incorporation of an outlier and the existence of possible sightlines to prominent features on the horizon. Geographically closer sites are less directly comparable (Burl and Jones 1972).

Burl (1988, 26) takes a diffusionist view of the spread of Four Posters from their Tayside 'heartland' both locally and into other parts of Britain, in the context of the search for new areas to cultivate and expanding mineral prospection during the Bronze Age. The main concentration in this heartland is linked both geographically and typologically to the Clava Cairns and the Recumbent Stone Circles of north-east Scotland, but the possibility of timber versions of Four Posters should also be borne in mind as having the potential to extend the distribution represented by the stone settings.

In a recent study of three Recumbent Stone Circles, Bradley has emphasised structural complexity and suggested that architectural traits may be selected from an available repertoire rather than expressing the movement of a developing style (Bradley 2005). At the Park of Tongland Four Poster, excavation suggested a complex sequence of activity during which the four stones did not all stand at the same time (Russell-White et al. 1992), and this is a possibility to be considered at the Druids' Altar. As Bradley points out, 'it is difficult to chart the spread of particular architectural devices when so little is known about the chronology of stone circles' (Bradley 2005, 4). Outside the concentration on Tayside, the extremely rapid fall-off in the known distribution may suggest that the Druids' Altar was designed from a ready-made package of ideas that came directly from Scotland. Wider artefactual evidence suggests links between other parts of Yorkshire and Scotland in the Bronze Age (Manby, King and Vyner 2003, 110 – 1), and the Craven uplands are rich in lead and also have deposits of copper. It may be no coincidence that the next 'certain' example of a Four Poster to the south of the Druids' Altar is in the equally mineral-rich Peak District, but isolated examples such as these are difficult to interpret without additional supporting evidence on a regional scale.

Astronomical potential

The incorporation of alignments to significant astronomical events (rising and setting positions) is now well established in prehistoric sites of different types and periods throughout Britain (Ruggles 1999). Evidence has also grown from a number of studies for the inclusion of horizon features as foresights or markers against which to observe such phenomena, although there has been a retreat from the original claims of very high precision alignments proposed by Alexander Thom (Thom 1967 and 1971). An investigation of the short stone rows on the Isle of Mull suggested that a combination of prominent peaks and long-distance views may have been significant factors in the choice of location for these sites (Martlew and Ruggles 1996). There is clearly no blue-print that was rigidly followed, and even within a relatively well-defined group such as the Scottish Recumbent Stone Circles there is some variation in the combinations of targets that were selected (Ruggles and Burl 1985). Four Poster stone circles suffer from the practical difficulty of identifying potential alignments, since the closely-spaced stones cover wide segments of the horizon; where the horizon is also flat and featureless it is virtually impossible to propose the deliberate indication of an astronomical event (for example the Four Poster at Corogle Burn: Thom 1971, 70 and Ruggles 1999 table 2.3). Long distance views and the orientation of the stones of Four Posters on prominent peaks has, however, been noted as a distinctive feature (Burl 1988, 37), but this has not yet been followed up by any comprehensive and rigorous analysis of the group as a whole.

Using the stones as an indicator of viewing position rather than to create alignments, the horizon seen from the Druids' Altar presents a coincidence of features that suggests a deliberate choice of location on the part of the circle builders. Midwinter sunset and the setting of the southernmost moon are not marked with any great precision: Pendle Hill provides a coarse foresight around 5° in width. The significance lies in overall visual impact rather than minute observational detail (Fig. 7). The factor that is common to both horizon foresights is that the sun and the moon will never have been seen to set any closer to due south – the direction indicated by the easternmost pair of standing stones and, potentially, the outlier. The solar alignment will of course have been observable on an annual basis, but the southernmost position of the setting moon is only reached over an 18.6 year cycle. This is the length of time taken for the moon's monthly rising and setting extremes to move between their northernmost and southernmost positions on the horizon, and back again. It is complicated by other factors that would require generations of observation before the cyclical nature of the moon's movements in the sky could be determined in any great detail. The practical difficulties of observing the moon over the necessary length of time, and the coarseness of the foresight, argue against any suggestion of a high-precision alignment towards Pendle Hill, but the setting moon would never be seen any further south on the horizon than this conspicuous feature.

Although the Druids' Altar has connections to a more northerly stone circle tradition, there is evidence in the local area and more widely in northern England for a long period of interest in astronomical observation, particularly in terms of solar alignments. The southern entrances of the Late Neolithic henge monuments at Thornborough allow a view to the horizon where the midwinter sun rises (Harding, Johnson and Goodrick 2008). In large henges such as these the high bank creates a close, artificial horizon from ground-level in the interior, restricting the

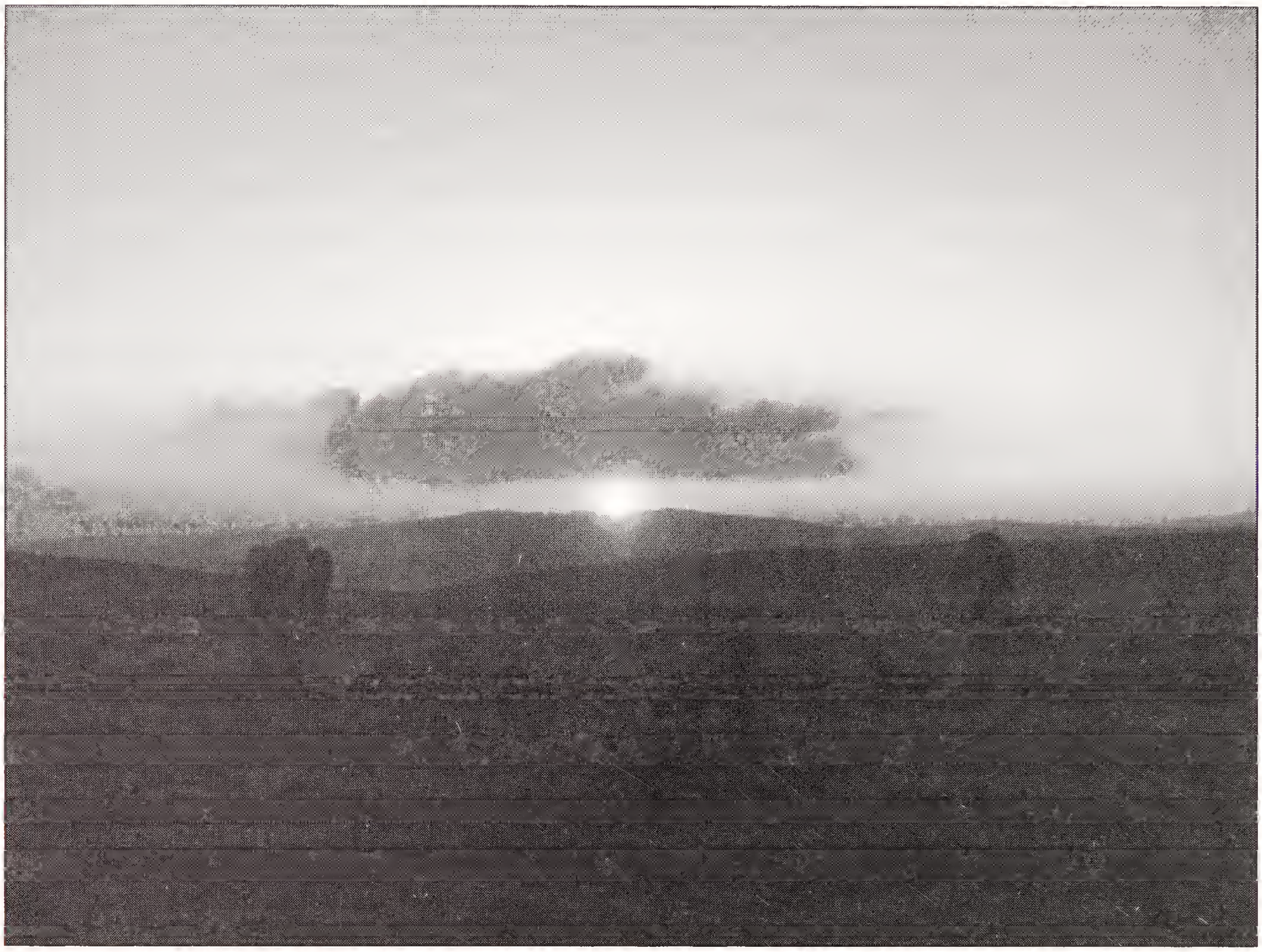

Fig. 7: Sunset at the Druids' Altar a few days before the winter solstice 2007.

view outwards to the distant horizon through the opposed entrances. It has been suggested that the view thus defined may have incorporated prominent landscape features, but the combination of this with astronomical events has not been explored in detail (Harding and Lee 1987).

The henge at Mayburgh in Cumbria is of particular interest due to antiquarian evidence for a Four Poster stone setting in the centre, laid out close to the cardinal points (Burl 1988, 27). From beside the single surviving standing stone a wide stretch of level horizon can be seen through the entrance, and this includes the point at which the sun rises around the time of the equinox. This has to be a calculated rather than a directly identified event, but it is an alignment that is also indicated at the nearby stone circle of Long Meg and her Daughters, where significantly larger stones mark points that are due east and west of the centre.

Closer to the Druids' Altar, the full horizon is visible above the smaller banks of the two Pennine henges at Yarnbury and Castle Dikes. At Yarnbury midwinter sunrise occurs above the right-hand side of the entrance, from a relatively featureless horizon, and at Castle Dikes the equinoctial sun rises up the strikingly steep northern face of Penhill Beacon (although the unimpressive entrance is around

15 degrees to the south of this from the approximate centre of the henge). These phenomena can be deduced unequivocally from careful survey and calculation, but the critical question is whether they were at all significant to the builders of the monuments, and were deliberately incorporated into considerations of location and design. Beyond the basic requirements of layout, monument builders may have selected and adapted ideas from a range of possibilities to meet local circumstances, as was demonstrated by the analysis of stone rows on the Isle of Mull. This adds to the difficulty of applying a rigorous statistical approach to the evidence from the Druids' Altar, isolated as it is from its likely peers and in a very different landscape. The site's location, however, is critical to the sun- and moonset phenomena being not only visible but visually striking, and after more than 3000 years this may be the strongest argument that can be mustered for deliberate intention on the part of the builders.

CONCLUSIONS

Despite confused antiquarian descriptions, the Druids' Altar represents a convincing example of a Four Poster stone circle, and the only one of its kind that has been identified in Yorkshire. Others such as the 'uncertain' and 'dubious' settings on the North York Moors may be variants, and yet others may have been destroyed or even constructed with timber posts rather than standing stones and so be far less visible in the landscape. The present distribution of Four Posters shows a concentration in eastern Scotland, but the mechanism by which such a distinctive construct arrived in the Craven Pennines requires much further research into the wider Bronze Age context in this extended northern region.

The Druids' Altar marks a location on the edge of the Craven uplands with a narrowly constrained and visually striking long-distance view towards Pendle Hill, and to the twin peaks of Hetton Common Head and Weets Top in the middle distance. These features stand out on the horizon (Fig. 7), and mark the southernmost setting positions of the moon and sun respectively (Fig. 6b). To find a megalithic setting at such a location is unlikely to be coincidence, but this is difficult to prove in an individual case; that the megalithic setting should be of a type that has its main focus some 186 miles to the north adds enormously to the potential significance of this site.

ACKNOWLEDGEMENTS

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EXCAVATIONS AT LOW FISHER GATE, DONCASTER, SOUTH YORKSHIRE

By J. M. McComish, A. J. Mainman, A. Jenner and N. Rogers
(York Archaeological Trust)

The excavations at Low Fisher Gate, Doncaster, South Yorkshire, produced a sequence of urban deposits dating from the late eleventh/twelfth to the eighteenth century. These included riverside structures of early thirteenth-century date, made in part from reused boat timbers, together with a series of superimposed tenement buildings of thirteenth- to sixteenth-century date and some post-medieval features. The site seems to have had mixed domestic and industrial functions throughout its history.

INTRODUCTION

Archaeological excavations were undertaken by the South Yorkshire Archaeology Field and Research Unit in 1993–94, at Low Fisher Gate, Doncaster, South Yorkshire (NGR SE 57508 03716), in advance of a major road-building scheme on behalf of the Borough Engineering Department of Doncaster Metropolitan Borough Council (D.M.B.C.). Initially two evaluation trenches were excavated on the site, followed by the main excavations, which took place within a circular coffer dam 37m in diameter (an area of 1076m^2), making this one of the largest archaeological excavations to have taken place within Doncaster. The main excavation was directed by Jane McComish, seconded from York Archaeological Trust; the Trust has also undertaken post-excavation assessment, analysis, research and dissemination.

The maximum depth of deposits excavated was c.3.4m below ground level, which was 10.1–10.4m above Ordnance Datum (AOD), but this was not achieved across the entire site. It was not possible to excavate all the archaeological deposits within the time available; no pre-eleventh-century remains were recovered, and features of late eleventh- to twelfth-century date were only exposed over a limited area. The excavations revealed a sequence of well-stratified urban deposits of thirteenth- to sixteenth-century date, together with some post-medieval features. Among the most significant finds were portions of two medieval clinker-built boats, which had been reused in riverside revetments, and a well-stratified collection of pottery that forms an excellent type-series for the town of Doncaster. The reused boat timbers have been reported elsewhere (Allen *et al* 2005), as has the environmental evidence from the site (Hall, Kenward and McComish 2003).

Post-excavation work undertaken in 1994–95 produced a detailed archive report which included a full description of the stratigraphic sequence (described by phases subdivided into groups of related contexts), together with the results of investigations into all of the artefacts recovered and environmental analysis of soil samples from the site. Consultation copies are stored at D.M.B.C., Doncaster Museum and Art Gallery, the South Yorkshire SMR, held by South Yorkshire Archaeology Service, and in microfiche form at the National Monuments Record Office. The tenement labelling system used here is different from that used in the archive report; for clarity the subdivisions of Tenement X are labelled X1–3 rather than V–X.

This article represents a summary of the 1994–95 archive report, which is far too detailed to be reproduced in full. For each group of phases there is a description of the stratigraphic sequence (by J. M. McComish), together with a summary of the associated pottery (by A. J. Mainman and A. Jenner) and artefactual data (by N. Rogers). The development of the building types present (by J. M. McComish) is included, together with a full pottery report (by A. J. Mainman and A. Jenner) containing a detailed analysis of the pottery sequence for Tenement Y and a discussion of the overall pottery sequence.

Some of the original post-excavation research is not included in the summaries within this article; the flints, together with the Roman artefacts (glass, coins and ceramic building material), are not summarised as they represent residual material. All of the architectural fragments were robbed from higher-status buildings elsewhere in Doncaster and brought to the site for reuse as building material. They therefore add little to the discussion of the history of the site, save to say that the inhabitants recycled any conveniently available stone in their building work. Only six of the sixty-eight architectural fragments were sufficiently diagnostic for either their original form or a date at which they were originally manufactured to be suggested; only these six are mentioned directly in the text. The medieval ceramic building material is discussed only in terms of its relationship to the structures present on the site, rather than as a collection in its own right. The medieval ceramic building material offers potential for further research, but this lies outside the scope of this article. Ideally this material needs to be researched in relation to comparative material from Doncaster, and in relation to the stratigraphic sequence from the site, in order to devise a series of fabrics and forms for the town, and to record the standard medieval brick sizes present, as these often varied from town to town. Relatively few medieval coins were present on site (sixteen examples), of which fourteen were residual. These are not catalogued below as they add little to the interpretation of the site. The waterfront timbers, together with associated waterproofing materials, are not discussed as they have been published elsewhere. The environmental analysis of soil samples from the site has also been published elsewhere, so is referred to here only where necessary for the interpretation of specific features. Should any specialists require access to any of the data not summarised here, the original site archive should be consulted.

In an effort to keep lists of numbers to a minimum, individual context numbers and group numbers are given only where necessary. All dimensions are in the form length x breadth x depth/thickness/height, unless otherwise stated. Artefacts are numbered as SF (small find) throughout the text. Unless otherwise stated all hearths were up to 1 x 1m in area and comprised limestone fragments set in clay. Deposits with exceptionally straight edges were interpreted as accumulating against sill-beams placed directly on the ground; in the interests of brevity the text simply states that there were sill-beams where such patterns occurred. Heights above Ordnance Datum are listed as AOD. It was not possible to illustrate every excavated feature; those not shown are marked 'not illustrated' in the text.

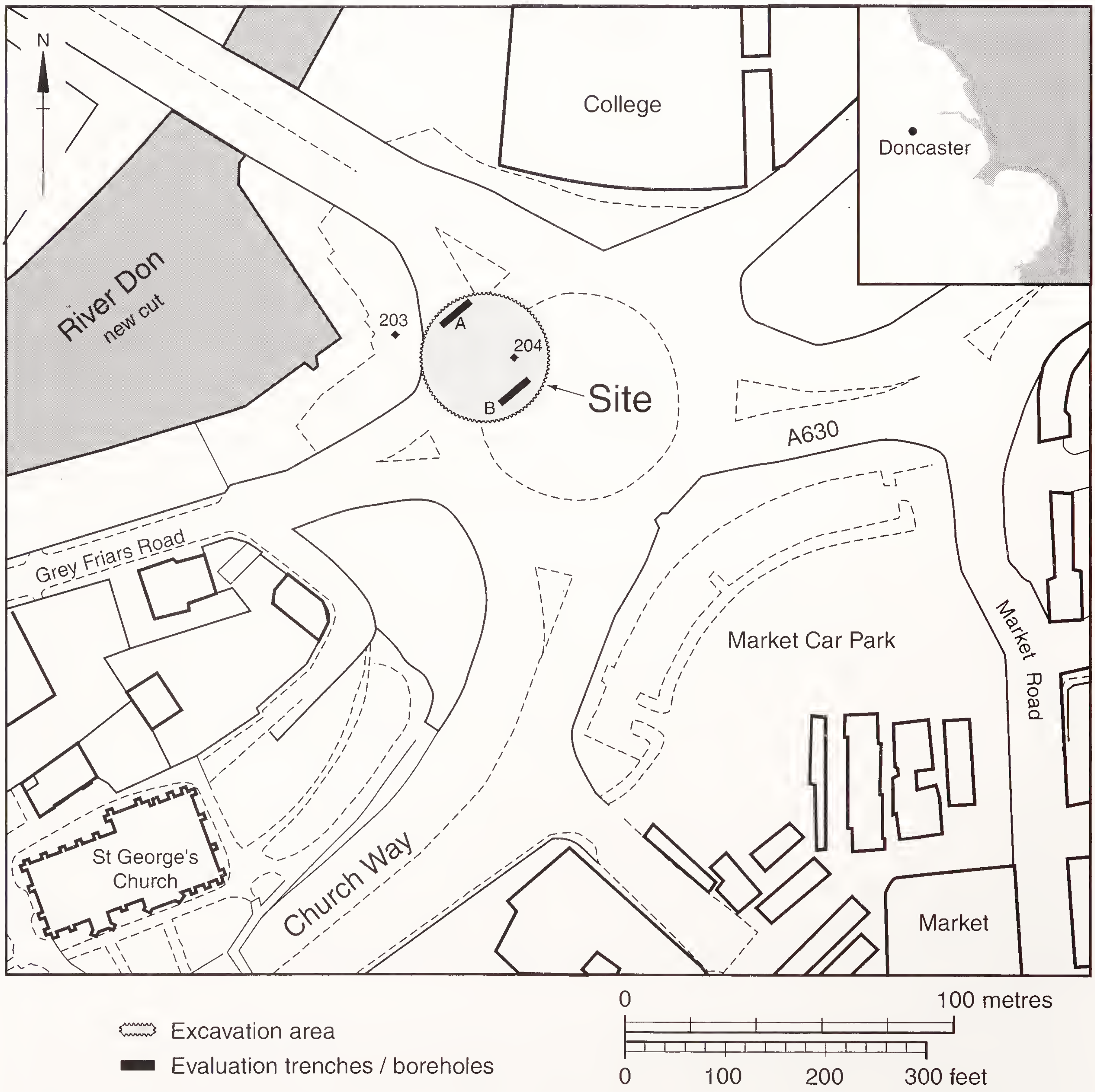


Fig. 1: Location of the site

HISTORICAL BACKGROUND

A detailed history of the town is beyond the scope of this article, though a brief summary of the topographical and economic development of Doncaster, concentrating on the twelfth–eighteenth centuries (i.e. relating to the features excavated at Low Fisher Gate), is provided here to place the excavations in context. Doncaster is located at the highest navigable point of the River Don where the river divides into two branches, called the Don and Cheswold. A Roman fort was built to the south of the River Cheswold, around which a civilian settlement was established, the focus of which may have been in the area of the present market place, as numerous remains were uncovered there during construction work in the nineteenth and twentieth centuries (Pollington 2007, 4.2.12). The history of this site in the immediate post-Roman period is obscure. A settlement at Doncaster is mentioned in Simeon of Durham's *Historia Regum* as being destroyed by fire in AD 764 (Buckland *et al* 1989a, 31). The possibility of water-oriented riverside tofts in Fisher Gate of this period has been suggested (*ibid*, 58), and activity of this date was hinted at by the excavations. It has been suggested that a burh with defensive ditches was constructed on the site of the Roman fort in the sixth or seventh century (*ibid*, 72 and 84). A recent redating of the pottery from these features to the late Roman period, however, removes much of the supporting evidence for this interpretation (Vince 2003, 1). Uncertainty therefore remains about the form and character of Doncaster at the time of the Norman Conquest. Doncaster appears as part of three separate manors in the Domesday survey, rather than as a place in its own right, with the greater part lying in the manor of Hexthorpe (Barber 2007a, xxii). The manor of Hexthorpe contained a church and two mills, and, while their location is not specified, it is probable that the church and possibly one of the mills were in Doncaster (*ibid*, xxiii). No freemen or burgesses are mentioned in Doncaster in the Domesday Book (*ibid*, xxiii).

The town underwent major changes following the Norman Conquest. A motte and bailey castle was built on the site of the Roman fort, possibly as a response to the northern rebellion of 1069 (Pollington 2007, 4.4.1), and the presence of a street called French Gate may imply Norman settlement in the town (Barber 2007a, xxiii). The street pattern in the centre of the town was largely determined by the presence of a town ditch and rampart, which was probably constructed in 1193 (*ibid*, 3). In the Middle Ages water from the Cheswold flowed along this ditch, which was not filled in until 1734 (Hey 1986, 42). Stone gates were built on all the bridges over the town ditch, and one of the wooden bridges was replaced in stone c.1247 (Barber 2007a, 1). New borough status in the late twelfth century may have provided the impetus for laying out a large triangular-shaped market place, around the church of St Mary, in the south-east corner of the town (Pollington 2007, 4.4.48). The market place was conveniently located near the river, enabling goods to be brought in by boat. The remains of St Mary's church were uncovered when the town hall was demolished in 1846, and suggest that the church was rebuilt in the mid-twelfth century, though three cist burials nearby have been used to argue for a pre-Conquest date (Martin *et al* 1994, 55–56).

The castle had probably gone out of use by the mid-twelfth century (Barber 2007a, 4). The site was then used for the church of St George, which may have originated as the castle chapel. There is a nineteenth-century reference to a Saxon font in the church (Barber 2007b, 328) but this does not survive, and there is no direct archaeological evidence to support such an early foundation date for this church (Pollington 2007, 4.4.9). It has been suggested that St George's was deliberately refounded after a disastrous fire in 1204 as part of a comprehensive reorganisation of the borough by a new manorial lord (Barber 2007b, 327). The precise relationship between the two churches unclear; it is widely assumed that St Mary's was the earlier church and the original parish church, but by 1360 St Mary's church had the status of a chapel and St George's was the parish church (Martin *et al* 1994, 56). This may have been to provide extra room for burial, since the expansion of the market made St Mary's church a less attractive space for burials (*ibid*, 56).

Doncaster became one of the most prosperous medieval towns in South Yorkshire. In 1334 its inhabitants contributed £17 in taxes, compared with £12 10s. 0d. from Tickhill and £7 3s. 4d. from Sheffield, and it owed its wealth chiefly to its weekly markets and annual fairs, both of which became nationally famous (Hey 1979, 53). Doncaster was clearly an important inland port in the post-Conquest period. Among the most notable exports from the town were the products of its potteries, which have been traced to Hedon (Humberside), 72km away, and possibly even to Bergen in Norway (Buckland *et al* 1989a, 39). In addition, the quantity of imported European pottery reflects the town's status as an inland port (Fenton-Thomas *et al* 2007, 261). The poll tax returns of 1379 list fifty different occupations, reflecting a broadly based economy (Martin *et al* 1994, 64). The poll tax returns of 1379 mentioned 296 people associated with households whose occupations could be identified. Of these the largest group were victuallers (20.6%), while the second largest group (15.9%) were associated with leather production (*ibid*, 64). The high proportion of victuallers reflects the position of the town on the Great North Road. The importance of leather working to the town is reflected in the presence of a guild of tanners, mentioned in a will of 1505, which was one of only two specifically craft-based guilds in the town (*ibid*, 64).

Doncaster grew further in the sixteenth century. A charter of 1532 confirmed ancient rights to hold weekly markets on Tuesdays and Saturdays and two fairs (Calendar to the Records of the Borough of Doncaster 1899, v). At the Dissolution St Mary's church was converted into a town hall and grammar school (Hey 1986, 137). By the 1590s Doncaster was noted as a new centre for the stocking-knitting industry, which served cities as far away as London (*ibid*, 137).

The town continued to prosper into the seventeenth century largely because of its markets. Tanning was also important to the town's economy and the tanners were using the former Moot Hall, located to the east of St George's church, in the seventeenth century (Buckland *et al* 1989a, 104). The town was clearly still functioning as an inland port in the seventeenth century. The corporation took a toll of a groat per ton on all goods shipped into or out of the town (Babtie 1999, 3.6). Hides were imported by river for the local tanning industry (*ibid*, 3.6). One Doncaster tanner bequeathed four boats and a share in a fifth vessel in his will of 1686, which suggests that river transport was of particular importance to the local tanning industry (*ibid*, 3.6).

Doncaster remained an important regional centre into the Georgian period, thanks to its markets and fairs. The racecourse, built in 1776, was an added attraction, which seems to have been second only to the meetings in York in the regional social calendar (Martin *et al* 1994, 82). In 1822 Edward Baines noted 'there are few towns in the kingdom in which so great a portion of the inhabitants possess independent fortunes, and the neighbourhood is remarkable for opulent families' (Buckland *et al* 1989a, 62). In 1828 Joseph Hunter described it as 'this wealthy and truly beautiful town' (*ibid*, 62). Major changes came with the industrial revolution, notably with the founding of the Great Northern Railway locomotive workshops in the early 1850s, creating a prosperous railway town which expanded rapidly (Martin *et al* 1994, 85).

DOCUMENTARY EVIDENCE RELATING TO FISHER GATE

The earliest references to Fisher Gate are five title deeds from the first half of the fourteenth century. The earliest two deeds, both dated to 1317, indicate that Constance de Knaresburgh owned a third of a messuage in '*vico piscator*' (street of fishermen), while her sister Joan, wife of John le Long, owned two parts of a messuage. Constance was recorded again in 1327 and 1328, renting out land in '*vico pescatoris*'. In 1350 Robert Pynchun, a spicer, rented a messuage in '*vico pistcatorum*' (Calendar to the Records of the Borough of Doncaster 1899, 1–3).

There are no title deeds referring to the street from the fifteenth to the mid-sixteenth century. By 1543 the street name had become anglicised to 'Fysshergait' (Calendar to the Records of the Borough of Doncaster 1899, 7). The spelling of the street name in title deeds of mid-sixteenth- to late eighteenth-century date varied, including Fishergate Street, Fyshergate Street, Fishergait, Fishergate, Fisher Gate and Fisher-gate (Calendar to the Records of the Borough of Doncaster 1899, 26, 33, 43, 57, 86 and 92).

Unfortunately the precise location of Fisher Gate is somewhat confused in the documentary sources and early maps. A title deed of 1627 described an orchard as being between 'Friendless Street and Fishergate', but in 1657 a 'lathe or barn' was described in 'Fishergate otherwise Friendless Street' (Calendar to the Records of the Borough of Doncaster 1899, 57 and 78). Friendless Street may perhaps have gained its name because tanners and pottery makers were concentrated in the area making it less than desirable (Barber 2007a, 5). The name Friendless Street was later changed to Friendly Street and it is shown as this on Townsend's map of c.1769. The street of Low Fisher Gate is shown as Fishergate on Townsend's map, but by 1854 is shown on the Ordnance Survey map as Low Fisher Gate. The parallel street to the south-east is shown as Friendly Street on Townsend's map, as Fisher Gate on Hunter's 'Map of Doncaster' of 1828, as Low Fisher Gate on Alexander's 1840 'Plan of Part of the Town of Doncaster', as Low Fisher Gate or Friendly Street on the 1852 Ordnance Survey map, reverting to Friendly Street on the 1893 Ordnance Survey map of the town. These two streets were connected by a cross-street at the south-western end called Sadlers Lane on the 1769 map, Fisher Gate on Hunter's map of 1828 and High Fisher Gate on Alexander's 1840 plan and all later Ordnance Survey maps.

The Calendar to the Records of the Borough of Doncaster (1899) lists c.30 title deeds recording leases in Fisher Gate dating from 1543–1790. These give occupations for many of the people taking out leases, with tanners representing the largest single group (seven tanners, three gentlemen, three aldermen, two widows, a chapman, a feltmonger, a carpenter, a yeoman, a shipwright, an iron monger, and a man described as a keelman in two deeds and as a mariner in another). Although the title deeds do not clearly locate any of the tenements, they are variously described as messuages (which generally indicates a piece of land with buildings on it; title deeds of 1543 and 1598–99), messuages with gardens (title deed of 1597), four cottages (title deeds of 1615 and 1629), a messuage or cottage with an orchard garth (title deed of 1620), the Nether Orchard between Friendless Street and Fishergate (title deeds of 1627 and 1726), a moiety of the Over and Nether Mootehalle (title deed of 1649), a lathe or barn (title deeds of 1657 and 1661), a moiety of the Over and Nether Mootehalle with two council houses adjoining (title deeds of 1657), a cottage in Soastang Lane within Fisher Gate (title deeds of 1676–77 and 1693–94), two cottages and a backroom in Soastang Lane in Fishergate (title deed of 1708–09), a moiety of a messuage and a kilnhouse with outhouses (title deed of 1702), a garden lying at the back of the Old Moot Hall (title deed of 1756), a messuage and buildings (title deed of 1757), and a warehouse and wharf (title deeds of 1790). In addition, and of relevance to the post-medieval finds from the excavations, many deeds concern rental of property described as 'a tanyard', 'the tanyard' or 'Tanhouse Yard' in Fisher Gate, though it is unclear if this represents a single plot of land or not (title deeds of 1597–98, 1619, 1627, 1637, 1647–47, 1654 and 1661). The leases of the tanyards were mainly taken out by tanners, but also by a widow in 1619 and by aldermen in 1627 and 1654.

There are occasional other references to the street, including William Shireborne, a chaplain, 'doing fealty' for a messuage in Fishergate in 1507, the seizure of beasts in Chawntell Yard, on Fisher Gate, and a list of rentals in the street of 1588 (Calendar to the Records of the Borough of Doncaster 1900, 24, 129 and 207). Various residents were fined for a number of reasons including three men fined in 1588 for failing to scour the watercourses in the street (Calendar to the Records of the Borough of Doncaster 1900, 226), and in 1580 two men for failing to clear dung from Fisher Gate and Friendless Gate respectively (Calendar to

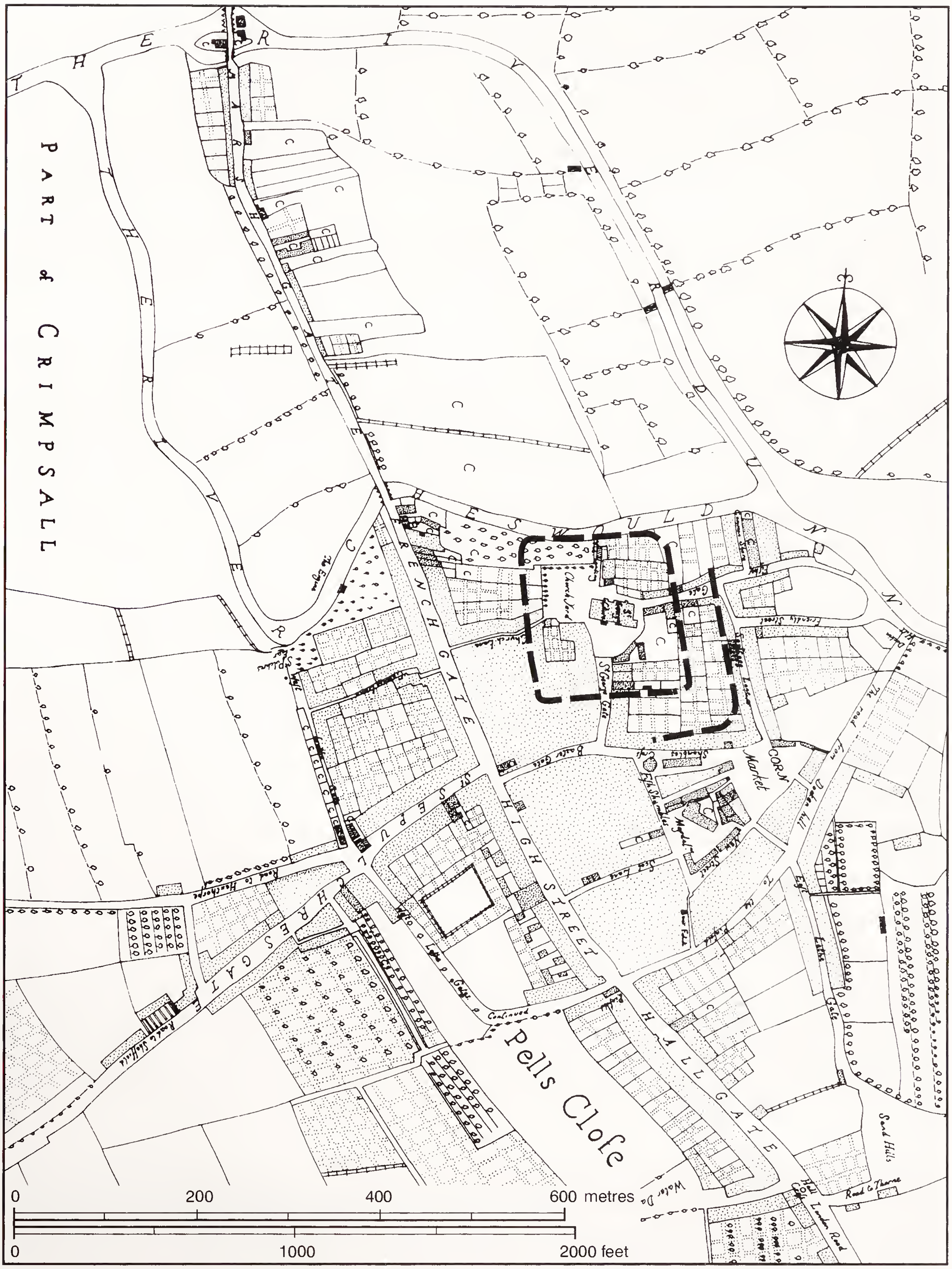


Fig. 2: Map of Doncaster in 1767 (based on Buckland et al 1989a, fig. 1) with the location of the Roman fort superimposed

the Records of the Borough of Doncaster 1902, 30). In 1581 a man was fined for failing to mend his fences (Calendar to the Records of the Borough of Doncaster 1903, 44), while in 1582 a man and a widow were fined for broken pavements in Market Place, Fisher Gate and Bardyke (Calendar to the Records of the Borough of Doncaster 1903, 60). In 1816 the street was widened (Calendar to the Records of the Borough of Doncaster 1902, 282).

The Common Lane or Common Shore gave access between Fisher Gate and the river. The word 'shore' implies a place for the docking of ships and transportation of goods, sometimes also implied by the name 'Common Staithe', which is shown at the end of Common Lane on the 1852 Ordnance Survey map. The words 'shore' or 'staithe' are most likely to be medieval in date, although they were not mentioned in documents until the late sixteenth century (Daniell 1998).

Within the area of excavation the first Ordnance Survey map of the town of 1852 shows five buildings fronting onto the street, to the rear of which are a corn warehouse and a timber, slate and coal yard, with associated saw pit. The corn warehouse was accessed from the Common Staithe while the timber yard had a frontage to Low Fisher Gate.

SUMMARY OF THE STRATIGRAPHIC SEQUENCE

Twenty phases of activity were identified archaeologically on the site. Evidence for Phases 1–3 was limited, as these deposits were not fully excavated. Phases 4–17, which dated from the end of the twelfth–mid-thirteenth century to the mid-fifteenth–mid-sixteenth centuries, comprised a series of tenements fronting onto Low Fisher Gate on the south-eastern side and extending to the River Cheswold on the north-western side. Phases 18–19 comprised a number of sixteenth- to eighteenth-century features, while Phase 20 comprised nineteenth- to twentieth-century deposits, the overwhelming bulk of which were removed by machine at the start of the excavation.

The description of the medieval tenements (labelled Tenements X1–3, Y and Z) makes up the bulk of this report. During the late twelfth–mid-thirteenth century the river channel lay within the area of excavation, and a series of riverside revetments and a draw-dock (i.e. a ramp where boats could be drawn up for loading or off-loading) were constructed. The river channel seems to have gradually infilled through a mixture of deliberate land reclamation and natural silting, moving the river channel north-westwards, beyond the limits of excavation. Although the river no longer ran directly through the site there is some evidence for riverside activity among the later phases on site: flint nodules from either the Yorkshire or Lincolnshire Wolds, which most probably arrived on site as ballast in boats from the Humber estuary, were built into the walls of some of the buildings constructed from the late thirteenth–early fourteenth century to the central decades to late fourteenth century. Some of the mid-fifteenth- to mid-sixteenth-century deposits

Phase	Date	Groups	Description
1		1–2	River-lain silt
2	Late eleventh/twelfth century	1–3	Pit, linear cut, timbers
3	Second half of twelfth century	1–16	Occupation
4	End of twelfth century to mid-thirteenth century	1–6	Division of site into three, possibly four, tenements, timber buildings, draw-dock and riverside revetment
5		1–6	Use of Phase 4 features
6	Late thirteenth to early fourteenth century	1–12	Continued use of the tenements, new timber buildings, revetment repair
7		1–4	Use of Phase 6 features
8	First half of fourteenth century	1–9	Subdivision of one of the tenements, new timber buildings with sill-walls
9		1–8	Use of Phase 8 features
10	Mid-/late fourteenth century	1–7	Merging of two of the tenements, new timber buildings with sill-walls
11		1–4	Use of Phase 10 features
12		1–5	Use of Phase 10 features
13		1–4	Use of Phase 10 features
14	End of fourteenth–early fifteenth century	1	Flooding
15	Mid-fifteenth–mid-sixteenth century	1–5	Continued use of tenements, new timber buildings with sill-walls
16		1–2	Use of Phase 15 features, disposal of leather-working waste
17		1–9	Use of Phase 15 features, stock-watering pond
18	Sixteenth century	1–4	Horticultural soil
19	Sixteenth–eighteenth century	1–9	Industrial activity, industrial hearths, hide processing
20	Nineteenth–twentieth century	1–2	Deposits cleared by machine at the start of the excavation

Table 1: Summary of the phases on site

contained rolls of animal hair and pot sherds with tar and animal hair adhering, evidence consistent with waterproofing boats, suggesting that boats were being repaired or built nearby. In addition, fragments of boat timbers were reused as a lid for a cistern of seventeenth- to eighteenth-century date. Clench-bolts and roves were present in deposits in Phases 3–8 and 10–14 (those in the later phases could be residual). Clench-bolts are often used in the construction of boats, so they may represent further evidence for boats or boat repair on the site, though it must be noted that clench-bolts have also been found used in carts, in buildings, such as the church door of St Botolph's Hadstock, Essex, and even in coffins (Ottaway 1992, 618).

Despite the fact that organic preservation on the site was poor (with the exception of two features) a large number of the environmental soil samples were analysed. These showed that 'despite numerous rebuildings and changes of layout, the site remained remarkably constant in its general character, and perhaps the range of uses to which it was put, over several centuries' (Hall, Kenward and McComish 2003, 142).

The environmental evidence suggested that the tenements were not primarily domestic in function. Firstly, the site was striking for the lack of cess-pits and, since faecal remains in such pits tend to become 'mineralised', the lack of such material cannot simply be explained away by the generally poor organic preservation on the site. Although it could be argued that such material could have been tipped directly into the river, some debris of this nature would be expected on a largely domestic site. Secondly, the site produced little evidence for what may have served as food; cereal grains were sparse (with the exception of one feature interpreted as a corn-drying oven), and many of the food remains present were hazelnuts and wild fruit seeds rather than cultivated crops. Oyster shells were also virtually absent before Phase 16 (mid-fifteenth–mid-sixteenth century), and even then occurred only sporadically; this near absence of shellfish was 'extraordinary for an urban occupation site where conditions were suitable for its preservation' (*ibid*, 135). In addition, only small quantities of animal bone were recovered (with the exception of two Phase 19 features where the animal bone was a by-product of industrial processes). The food debris present on the site was interpreted as pointing 'to the consumption of portable "snack foods" by people who were working at this site but not living there all the time' (*ibid*, 137).

In contrast to the environmental evidence, the pottery recovered was a domestic assemblage. Pottery wasters accounted for 6.5% of the assemblage from Phases 8–9 and 20% of the assemblage from Phase 10 (with small quantities of wasters in Phases 4–7 and 11–13). Since there is no evidence for pottery production on this site, these wasters must have originated from kilns in the Hallgate area of Doncaster. The volume of wasters present, particularly in Phase 10, would seem to suggest that considerable quantities of soil must have been imported to the site from elsewhere in Doncaster, possibly to raise the ground level at Low Fisher Gate. It is equally possible that much of the non-waster pottery was brought to the site in imported soil, in which case the domestic nature of the pottery assemblage may be somewhat misleading and could have little bearing on the function of the site.

Assuming the environmental data are correct, and the primary function of the site was not domestic, it could be seen as mainly industrial and/or commercial. There was evidence of industrial activity throughout much of the site's history, though the nature of this activity seems to have changed over time, and varied from tenement to tenement. Quern fragments were present in most of the phases of activity, implying that milling was being undertaken on the site or nearby. The use of querns in medieval households is a subject of debate and they may have been for grinding foods other than flour for bread. From the twelfth century there are charters which tried to ban the use of hand-mills in an attempt to force people to pay to use manorial mills, but their use probably continued in spite of this (Biddle 1990, 882). It is unclear precisely when the querns on Low Fisher Gate were originally used, since they could represent residual finds.

During the late thirteenth–early fourteenth century Tenement X had industrial functions. A corn-drying oven and a smithy forge base were present, together with a dump of slag which accounted for 66% of all the slag recovered during the excavations. It is unclear if this deposit represents the in situ remains of smithing or simply the dumping of material originating from the forge. A scrapped timber interpreted as being from a static bellows was also found in the late thirteenth- to early fourteenth-century deposits, and was perhaps originally associated with the smithy forge base.

The earliest evidence for the processing of leather was an early fourteenth-century currier's knife recovered from a building in Tenement Y. The lack of any associated leather fragments may be due to poor organic preservation. A spindle whorl recovered from a building in Tenement X3 may suggest that spinning was taking place in the first half of the fourteenth century, albeit on a small scale. One of the early fourteenth-century buildings (Building 9) contained three hones, perhaps indicative of some other unknown industrial function. There was also some lead-alloy working waste from deposits adjacent to Building 9.

One of the buildings in Tenement X3/Y dating to the mid–late fourteenth century may have had an industrial function, as five hones were found in one of its rooms (Room A, Building 13); Room B of the same building contained a hearth and two stone-lined soakaways, though the precise nature of what was being produced is unclear. Debris from possible lead working was found scattered throughout the contexts of Phase 12, which was mid–late fourteenth-century in date.

The mid-fifteenth- to mid-sixteenth-century phases (Phases 15–17) yielded abundant evidence for leather working, specifically from trades associated with footwear production including cordwainers (manufacture of new shoes), cobblers (who repaired and refurbished old shoes) and translators (who cannibalised old shoes to produce new ones). The medieval leather-working material came from the infilling of a large pit which contained over 800 fragments of leather (Phase 16), virtually all from cattle, though with some fragments of sheep or goat leather. The sixteenth-century leather-working waste (Phase 17) was mainly from cut-down footwear, presumably derived from cobbling or translation rather then actual shoe manufacture. Most of this leather was again cattle leather. Excavations on the site of the former Askew's Print Works, c.100m to the south-west of the Low Fisher Gate site, revealed several phases of medieval tanning pits (Chadwick *et al* 2008, 23), showing the importance of leather processing and related trades in this part of the town in the medieval period. A large pond on the site (Phase 17), interpreted on the basis of the environmental evidence as a pond for watering livestock, suggests that animals were being kept in the area prior to slaughter; large-scale butchering of animals was taking place in the area (though not directly on the site) from the sixteenth century onwards. As noted above, the mid-fifteenth- to mid-sixteenth-century deposits also produced evidence for boat building or repair in the area.

Animal processing seems to have remained important in subsequent periods. Later slumpage into the livestock watering pond (Phase 19) contained cattle leather-working waste and leather shoe fragments datable to the sixteenth century. A stone surface was associated with large numbers of sheep metapodials (Phase 19). Sheepskins were used in the production of white leather and it is thought that sheepskins were brought to tawers (producers of white leather) with their hooves and feet still attached, allowing the feet to be used as handles for stretching the hides, being discarded once the skins had been treated. In tawing the hides are treated with alum or oils, whereas in tanning hides are soaked in tannin-rich solutions. Large numbers of sheep metapodials have been recovered from excavations in seventeenth-century deposits at Sprotborough, 2km to the west of Doncaster, which were interpreted as relating to the production of high-quality white leather (Fenton-Thomas *et al* 2007, 245 and 264). In addition, timber-lined tawing pits packed with sheep metapodials, probably of eighteenth-century date, were present at the site of the former Askew's Print Works, 100m to the south-west of the Low Fisher Gate site (Chadwick *et al* 2008, 45–46). This suggests that production of white leather was important in the area. A pit of late seventeenth- to eighteenth-century date containing abundant discarded cow bones provided evidence for butchery, and for tanning and horn production (Phase 19). An eighteenth-century pit of horn-working waste was also present at the site of the former Askew's Print Works (*ibid*, 46). It should be noted that the Low Fisher Gate site did not produce any features that could be interpreted as pits for the soaking of hides. An industrial hearth was present, which was interpreted at the time of excavation as relating to copper smelting, though this interpretation is now in doubt and it seems more likely to have been associated with leather working in some way (see Phase 19 below).

It has been noted that 'convincing evidence for shops from excavations remains fairly sparse, partly because of the impermanent nature of diagnostic furniture and fittings, but also because of the inevitable disturbance of archaeological deposits along intensely exploited street frontages' (Grenville 1997, 171). While it is possible that some of the buildings on site may have been shops, this would be almost impossible to prove from the excavated remains.

There is some evidence that the site was of fairly low status in the later medieval and post-medieval periods. A fragment of textile from Phase 16 and two fragments from Phase 17 (mid-fifteenth–mid-sixteenth century) were of low-grade cloth. This fits with the documentary references to uncleared dung in the street in the sixteenth and seventeenth centuries, implying it was a less than desirable area.

PHASE DESCRIPTIONS

PHASES 1 AND 2: PRE-DATING THE SECOND HALF OF THE TWELFTH CENTURY

The Stratigraphy

Roman deposits were probably present on the site, though these levels were not reached during the course of the archaeological excavations. A borehole sunk in 1988 (Borehole 203, Fig. 1) had material described as concrete, ash and brick fragments at depths of between 3.57 and 3.87m AOD (which was over a metre beneath the earliest of the medieval deposits excavated on the site), sealed by 4.3m of sandy clays with pockets of peat, which were in turn beneath 2m of modern deposits described in the borehole log as 'made ground' comprising brick ash and concrete. The depth and relative stratification of this material, and the presence of concrete (which was used during the Roman period), all suggest that this represents undefined Roman activity. Residual Roman pottery was also found during the Doncaster waterfront excavations, some 250m to the north-east of the Low Fisher Gate site, which suggested that features of this period might be present below unexcavated layers of alluvium (Brown 2004, Trench I).

The earliest deposits observed during the archaeological excavations occurred in a series of test pits 2.5 x 1m, 1.5 x 1m and 1.7 x 1.1m in size, and in the base of several later cut features. Phase 1 was an undated deposit of clayey-silt in excess of 0.3m thick, interpreted as being river-lain. The upper surface of this deposit was at 5.18–6.09m AOD. This may equate to flood deposits of late Roman/early post-Roman date noted elsewhere in Doncaster (Buckland *et al* 1989a, 15). If so, the thickness of this deposit would have effectively sealed any Roman deposits in the area, limiting later disturbance. This could account for the relatively low level of residual Roman artefacts on the site.

Residual pottery of late ninth- to eleventh-century date was present at the site of the former Askew's Print Works, suggesting pre-Conquest activity in the general vicinity (Chadwick *et al* 2008, 69), though no direct evidence of pre-Conquest activity was found on the Low Fisher Gate site.

Cut into the river-lain deposit, but again seen only in the bases of test pits and later features, were a few features dated by pottery to the late eleventh/twelfth century (Phase 2). There were two cut features, one of which was linear, possibly a drainage channel leading to the river, while the second, lined with wooden stakes, was interpreted as a wicker-lined domestic rubbish pit on the basis of food remains within its backfill. There were also two horizontally lain timber fragments 0.14 x 0.4m and 0.5 x 0.16m in size and three timber stakes 0.04m in diameter but of unknown length. This woodwork was only partially exposed and it is impossible to know what kind of structure was represented, though clearly some kind of building activity was taking place on the site. The upper surfaces of these features were at between 5.79 and 6.61m AOD. It is possible that 'woody debris' found at between 5.33 and 6.8m AOD in a borehole sunk in 1988 (Borehole 204, Fig. 1) may represent related timber features.

The Pottery

Phase 1

No pottery was recovered.

Phase 2: mid-twelfth century

Only twenty-eight sherds were recovered from Phase 2. Twelve of these were fragments of Lincoln fine-shelled ware jars and a further seven were part of a Grimston-Thetford costrel (Fig. 14 in the Pottery Report). Hallgate C ware was represented by four sherds and there were two further sherds of a white gritty ware fabric. A reduced gritty ware sherd, a fragment of glazed Stamford ware and a smooth white ware, possibly an import, make up the remaining sherds.

Little can be said about such a small assemblage but it sets the pattern of wares which appear in the subsequent phases. All the wares mentioned in this part of the text are discussed in greater detail in the later pottery section (see below). A date before the middle decades of the twelfth century is unlikely for Phase 2 on the basis of this assemblage.

PHASE 3: SECOND HALF OF THE TWELFTH CENTURY

The Stratigraphy

Phase 3 features were only exposed in the south-eastern half of the excavation area. An extensive 0.5m thick deposit of silty-clay was interpreted on the basis of micro-morphological analysis as a flood deposit. Above this deposit was a series of interspersed dumped deposits, and pit cuts which ranged from 0.64 x 0.62 x 0.34m to 4.0 x 3.7 x 0.2m in size. Environmental analysis of seven of the pit backfill deposits, together with one of the dumped deposits, revealed the disposal of general occupation debris including food remains, charcoal, charred heather twigs and hay/straw, sphagnum moss, possible faecal material and slag. The charred hay/straw could represent either dumped stable manure or possibly roofing material. Many of the dumps and pit backfills contained high levels of ash and charcoal, but only seven contexts contained slag and this was not in quantities suggestive of iron working on the site.

Some structural elements were present, including randomly scattered post-holes (ranging from 0.4 to 0.6m in diameter and 0.06–0.18m deep), two beam-slots and a fragment of drystone walling, but no clear building layouts could be determined among these structural features due to later truncation. The wall and the beam-slots were so severely truncated that their original size is unknown, but they were all aligned at right angles to the modern street frontage. This may imply that the earlier street was located in a similar position to the modern street, and that buildings in the area were being aligned in relation to the street at this stage. Two hearths were also present, though whether these were within buildings or not is unclear.

The only remains which could be interpreted as a building (Building 1, Fig. 3) comprised fragments of two beam-slots at right angles to one another, together with associated internal earth floors, two hearths (one of which was subsequently replaced) and three adjoining stake-holes, presumably for an internal fixture. The original size of this building and the orientation of its long-axis in relation to the street frontage are unclear, though it was in excess of 7 x 7m in area. Three aligned post-holes may represent a later internal subdivision of this building, or a fence line post-dating the building. The later tenement boundaries bore no relation to the position of Building 1.

The Pottery

An assemblage of just under a thousand sherds (963) was recovered from Phase 3 and its composition suggests a date for this phase in the second half of the twelfth century. The pottery assemblage is overwhelmingly domestic in character and the majority of forms represented are jars, bowls and pitchers.

Already by this period the Hallgate products are a significant part of the assemblage (Table 2). Hallgate A wares account for 8.5% (by sherd count), Hallgate B 13% and Hallgate C 2%. In addition to defined Hallgate A wares, a further 19.5% of the assemblage has a closely comparable fabric but is classed as splashed ware 1 on account of its splashed rather than suspension glaze; a further 5.5% were in a similar fabric to Hallgate A but not quite the mainstream product and are recorded as splashed 1/Hall A. These distinctions are discussed below (p.0) in

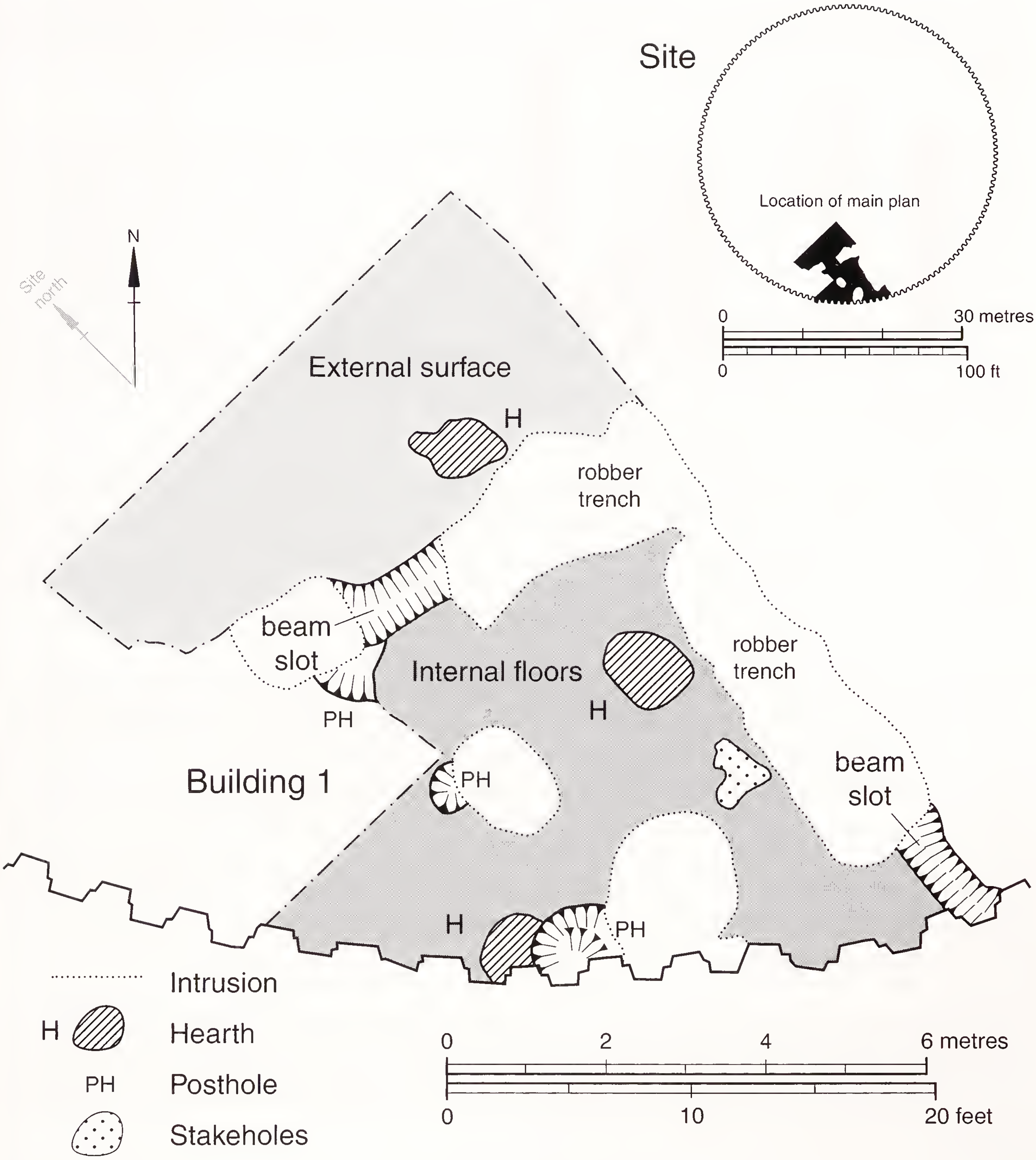


Fig. 3: Phase 3 Building 1

more detail. Hallgate A-type fabrics, therefore, account for almost 35% of the assemblage and the Hallgate wares as a whole represent about half the assemblage.

The next largest group are the shell-tempered wares, whose source is Lincoln and Lincolnshire. These are dominated by the Lincoln fine-shelled ware (LFS) which account for 18% by sherd count and whose currency is c.970–1200 (Young and Vince 2005, 274); Phase 3 seems to mark the point where they are still a major coarse ware, overlapping with the local early medieval shelly wares (LEMS) which represent only 1.5% of the assemblage and whose currency is from c.1120–1220 (*ibid*).

A significant number of various types of unglazed gritty and splash-glazed wares were also recovered from this phase. Of these, the white gritty wares are the most common (7% by sherd count), with oxidised and reduced gritty wares present in small amounts. This is consistent with findings from other sites in Doncaster (Cumberpatch *et al* 1998–99, 52) where gritty, sandy and splashed wares in oxidised and reduced fabrics were recovered from mid-eleventh- to early twelfth-century contexts. The same pattern is seen elsewhere, for example at York and Ripon, where expanding urban centres supported a growing number of pottery producers.

There is a small amount of residual pottery including Roman (included in 'other' in Table 2), Torksey-type wares, other sandy grey wares, and Stamford wares. Residual material might also include some of the gritty and splashed wares referred to above; their origins are in the eleventh century and products would, therefore, have been in circulation for almost a century.

The proportions of the different wares are shown in Table 2. The column labelled 'other' includes types which each represented less than 1% of the total. These include small numbers of both identified and unidentified types including Beverley splashed and other splashed wares, other types of shelly wares (including North Lincolnshire shelly wares (NLST) and unidentified shelly wares, early glazed sherds, early handmade sherds, other types of gritty wares and a very few sherds of possible French and Rhenish wares. These include Paffrath products and sherds of a fine white fabric which might be French in origin or might be a more local white fine ware (A. Vince, pers. comm.).

It is striking, however, that by the second half of the twelfth century the Hallgate A-type fabric has been successful in taking a significant proportion of the market and, as subsequent phases show, its success grows rapidly at the expense, initially, of the shell-tempered wares.

The Artefacts

Amongst the finds recovered from contexts in Phase 3 were groups of iron clench-bolts mostly found in dumps (for example SFs11860, 11906, 11908 and 11783, 11904). Also from a dumped deposit was a copper-alloy buckle of zoomorphic form, part of the frame formed by a beast biting its own back, and probably of eleventh- to twelfth-century date (SF11412). Other finds include an iron lobed horseshoe of late eleventh- to thirteenth-century date (SF11781), and a complete iron whittle tang knife (SF11867). A pit fill produced an iron rove (SF11618), and iron strap (SF11667), several nails, and a twelfth- to thirteenth-century iron pad-

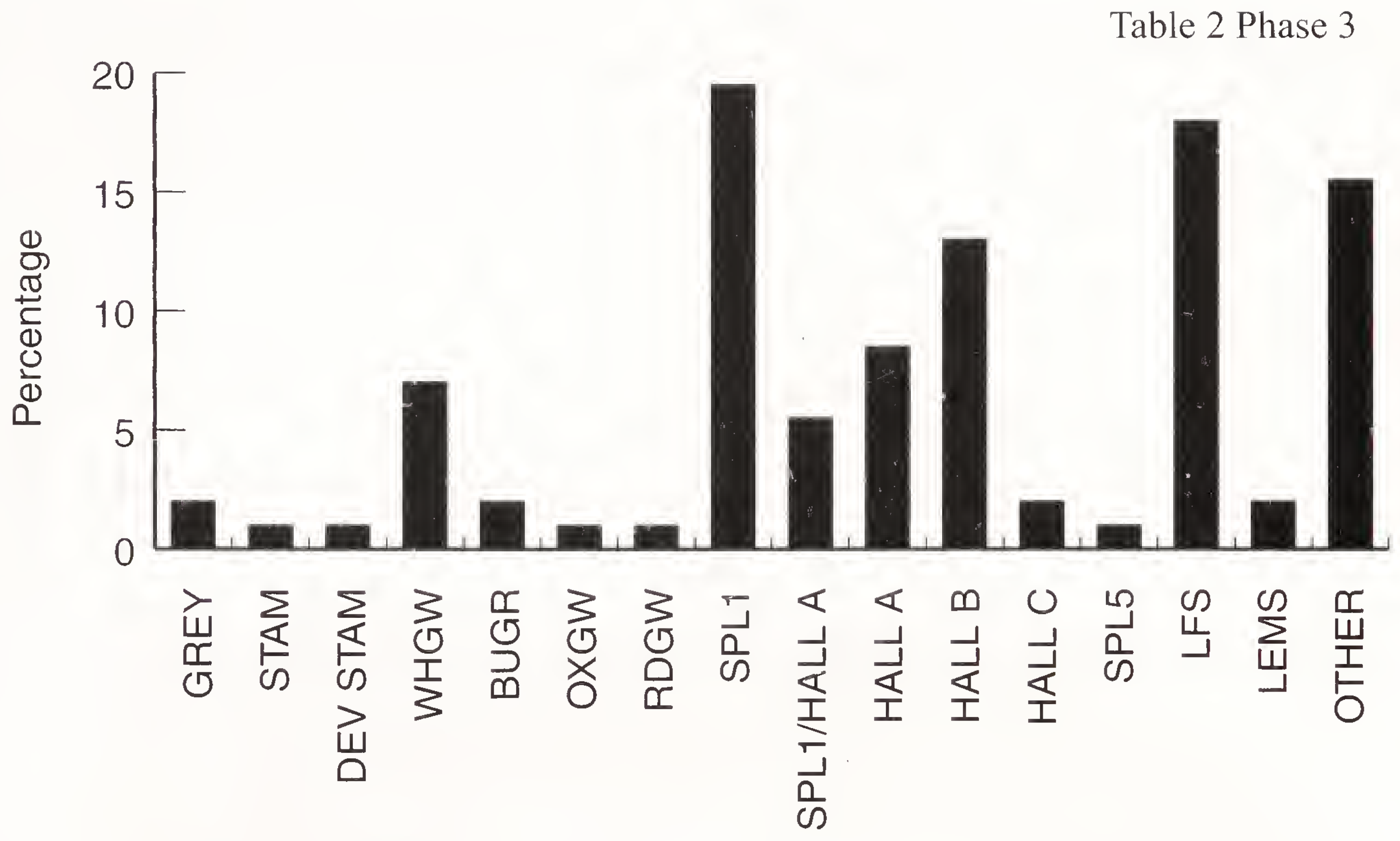


Table 2: Overall percentages by sherd count Phase 3

lock key (SF11617). Another lobed iron horseshoe fragment of late eleventh- to thirteenth-century date (SF11696) came from another fill of the same pit.

PHASES 4–5: END OF THE TWELFTH TO MID-THIRTEENTH CENTURY

The Stratigraphy

There was a marked change in layout at this time, with the establishment of three tenements (labelled X, Y and Z) aligned north-west to south-east across the site (Fig. 4). Tenement X was at least 10m wide and may have been wider, as its south-western limit was unclear; Tenement Y was 14m wide and Tenement Z extended beyond the limits of excavation, so its width is unknown. Many of the features within these tenements were severely truncated by later activity.

Tenement X

A line of post-holes formed a boundary fence between Tenement X and Y adjacent to the street frontage, while a truncated linear cut measuring 3 x 1.4 x 0.9m to the north-west of the post-holes probably represents a boundary ditch between these tenements.

Adjacent to the street frontage there was a compacted gravel yard surface 9 x 13m in area which seems to have been periodically repaired where it slumped into earlier features or wore away. The surface was cut by two rubbish pits 1.3 x 1.63 x 0.47m and 4 x 2 x 0.34m in size. A hearth (not illustrated), 0.25 x 0.25m in area, was associated with a linear cut, 0.9 x 0.45 x 0.13m in size, and a surface of limestone fragments and slag. These features are interpreted as a smithing forge-base with a run-off channel, and an associated yard area on which smithing waste was spread. There was no clear evidence of a structure around this forge-base.

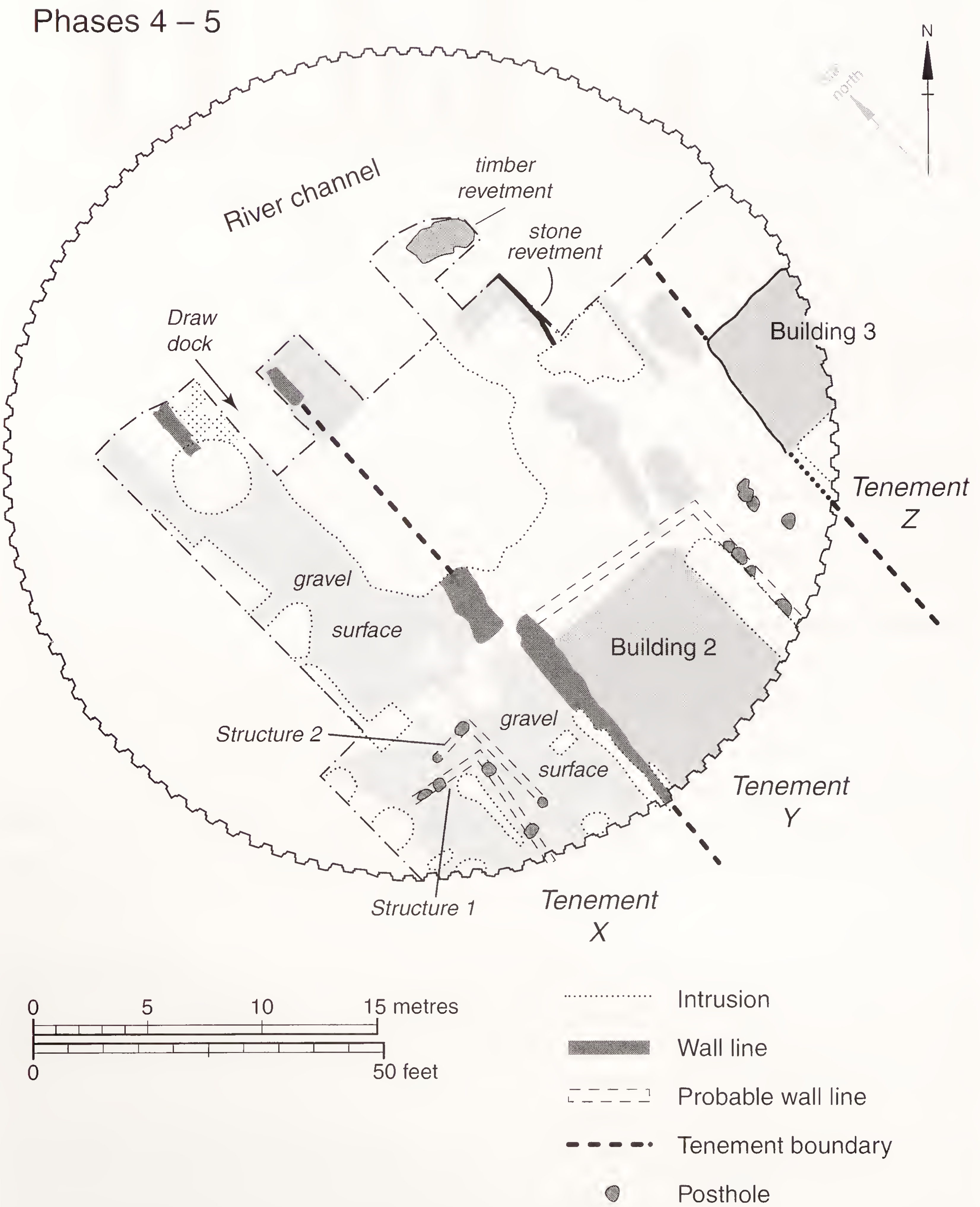


Fig. 4: Phases 4–5

A second hearth (not illustrated), 0.84 x 0.80m in area, located 3m south-east of the forge-base, may represent an associated smithing hearth.

Six post-holes ranging in size from 0.43 to 0.64m in diameter and 0.15 to 0.44m deep may have formed formed two sides of a rectangular structure in excess of 3.5 x 4.5m in area (Structure 1). A second similar arrangement of four post-holes 0.4–0.6m in diameter and 0.34–0.5m deep and a beam-slot 2.13 x 0.22 x 0.12m in size may have formed two sides of a rectangular structure in excess of 2.8 x 4.8m in area (Structure 2). No associated internal surfaces survived so the precise function of these structures is unclear; it is also impossible to determine which of these two was the earlier.

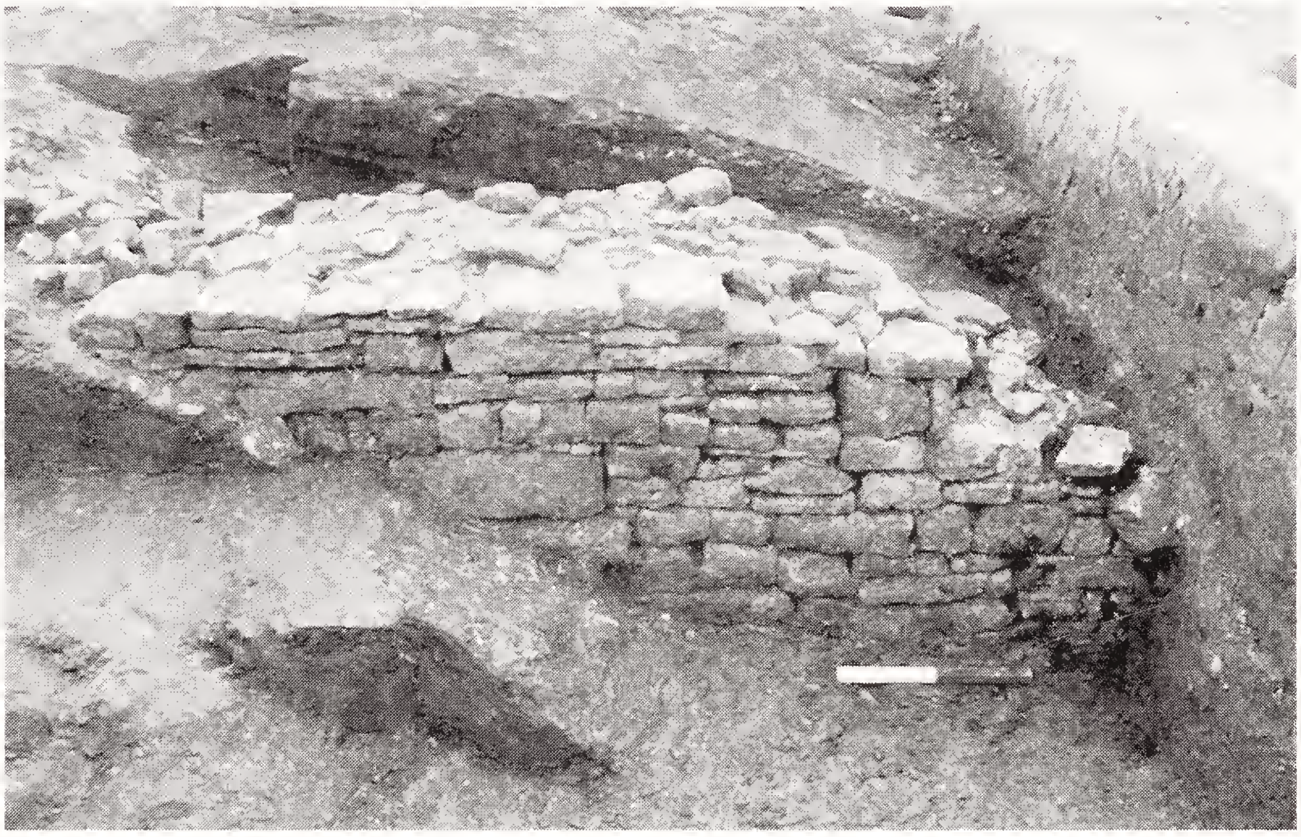


Plate 1: The north-easternmost draw-dock wall

A structure interpreted as a draw-dock was built into the river channel. This consisted of a surface of crushed limestone fragments rammed into the river foreshore, on which two parallel roughly coursed drystone walls were built into the river channel. The walls were 5m apart and each was approximately 3m in length, 0.7m wide, and survived to a maximum height of 1.1m. The draw-dock facilitated easy access down to the waterline of the river for the loading and unloading of boats. Adjacent to the walls were two timber posts 0.09 x 0.08 x 0.59m and 0.13 x 0.13 x 0.69m, which were possibly for the tying up of boats. A second possible draw-dock feature was found in excavations of the Doncaster waterfront c.250m to the north-east of Low Fisher Gate, comprising a denuded clay and stone bank at right angles to the river channel of twelfth- or thirteenth-century date (Brown 2004, 7.10).

The initial stone surface of the draw-dock was later replaced by a new gravel surface into which three post-holes 0.15–0.25m in diameter were dug; the precise function of these post-holes is unclear. A group of deposits around the draw-dock walls represented the deposition of river silts and the deliberate dumping of waste into the river channel.

Tenement Y

A building (Building 2) fronted onto Low Fisher Gate with a yard to the rear and north-eastern side. Building 2 was 9.5m wide and more than 10m long. Its south-western side was defined by a clay bank 1m wide and 0.16m high, with an integral post-hole 0.95 x 0.7 x 0.45m in size; these are interpreted as supporting a sill-beam and upright timber for the building. The north-western and north-eastern walls were of earth-fast posts in post-holes 0.36–0.8m in diameter and 0.1–0.3m deep. The internal area was levelled and a number of earth floors accumulated, interspersed with stake-holes, post-holes and linear cuts which presumably represented internal fixtures for the building.

The river frontage was formalised. A timber revetment, of which only the north-easternmost 3m was excavated within the time available, was built from a length of articulated planking from a scrapped clinker-built boat, which had been caulked with rolls of wool dipped in tar; it was held in place by two substantial timber posts. Dendrochronological dating yielded a felling date sometime after 1166, and it is probable that the boat was constructed in the last quarter of the twelfth century. How long the boat was in use before being scrapped is unknown. (It should be noted that this feature was placed in Phase 6 during the initial post-excavation work, but was rephased here. This was because the dendrochronological and pottery dating together suggested that these timbers pre-dated Phase 6 by almost a century.) In the northernmost corner of the yard was a small river inlet; a wall of coursed limestone blocks bonded with clay 2.7m in length and 0.7m wide was inserted along the western side of this inlet, presumably to aid the loading/offloading of boats. This wall was at right angles to the timber revetment.

An irregular linear cut, 6 x 2.7m in area led from Building 2 to the river inlet; the base of this feature sloped downwards towards the river, implying that it was for drainage. Within the yard area were five randomly spaced post-holes and two rubbish pits. An arbitrary ‘T’-shaped trial slot excavated through the yard deposits revealed a series of naturally occurring silt deposits within the river inlet, implying that it had begun to silt up; in addition a dump of limestone chippings may represent an attempt to create a firm surface in the yard.

Tenement Z

A rectangular cut in excess of 4.4 x 5.9m in area and 0.18m deep, with series of post-holes ranging in diameter from 0.27 to 0.64m along its south-western side, is interpreted as the remains of a building (Building 3). No internal features were identified.

The Pottery

Proportions of the different pottery types continue the trends seen in Phase 3, with the Hallgate A-type fabrics dominating the market (Table 3). The composition of the assemblage is again domestic in character, with forms including jars, pitchers, skillets, bowls and pipkins in a variety of fabrics.

Hallgate A wares account for 21.5% of the assemblage in these phases, while those sherds which were attributed to Hallgate A/splashed ware 1 account for a further 13.5%. In addition, sherds which were initially recorded as splashed glaze types 1 and 6, but were later seen as part of this same industry, account for another 10.5%. The overall share of the market of the Hallgate A-type fabrics, therefore, has increased to about 45%. The proportion of Hallgate B wares has decreased while Hallgate C wares remain a minor component. When combined with the other Hallgate kiln products it is clear that pottery produced in the city was providing over half the wares recovered from the site.

The success of the Doncaster potteries is at the expense of the Lincolnshire shell-tempered wares. These are still an important component of the assemblage although their overall importance has diminished from Phase 3. Lincoln fine-shelled wares in particular have dropped to 10% of the assemblage, while the local early medieval shelly wares remain at just over 1%.

As structural developments took place on the site, the incidence of the redeposition of sherds increases, and residuality is a factor which needs to be taken into account when examining these figures. There are a handful of recognisably earlier wares which include Roman, Torksey-type and Stamford wares, and an increasing, but less easily identifiable, number of the types of gritty and splashed wares are also likely to be residual in these phases. The same is probably true of the shelly wares as the Lincoln fine-shelled wares are likely to have peaked and are going out of production by this time (Young and Vince 2005, 88). The white gritty fabric which was a significant component in Phase 3 has dropped in importance, while the buff gritty ware accounts for 6%.

Minor wares (less than 1%, shown as 'other' in Table 3) include residual Roman, various sandy, gritty and splashed wares, as well as small quantities of imported wares, York glazed ware, Humber ware, London-type ware and Tees Valley ware. Some of these make a contribution to the debate on chronology. For example, York glazed wares would be in circulation at this time, as would the London-type wares. The suggested chronology is, however, a little early for the Saintogne and perhaps for the Scarborough wares (1%), which might indicate that the phases extend into the later thirteenth century. Apart from these sherds there is no reason to date these phases beyond the middle decades of the thirteenth century.

The activities which took place on the site during these phases will inevitably have affected the composition of the pottery assemblage. These include post-hole and pit digging which will have brought earlier material to the surface, and episodes of levelling will have redeposited material. It is likely that this latter activity includes the importation of soil from outside the area excavated, as the first wasters or seconds (which become a more significant element later on in the sequence) were found in these deposits. There is no evidence for pottery production on the site so these must derive from a nearby production area and have been incorporated into soil which was then brought to site. Additionally, and potentially significantly, the environmental data which are described earlier (p.0) have suggested that domestic occupation may not have been the prime purpose of the structures encountered, which raises the question of how much of the assemblage relates to contemporary use. Nevertheless, there are clear trends to be seen in terms of the changing profile of the pottery types recovered.

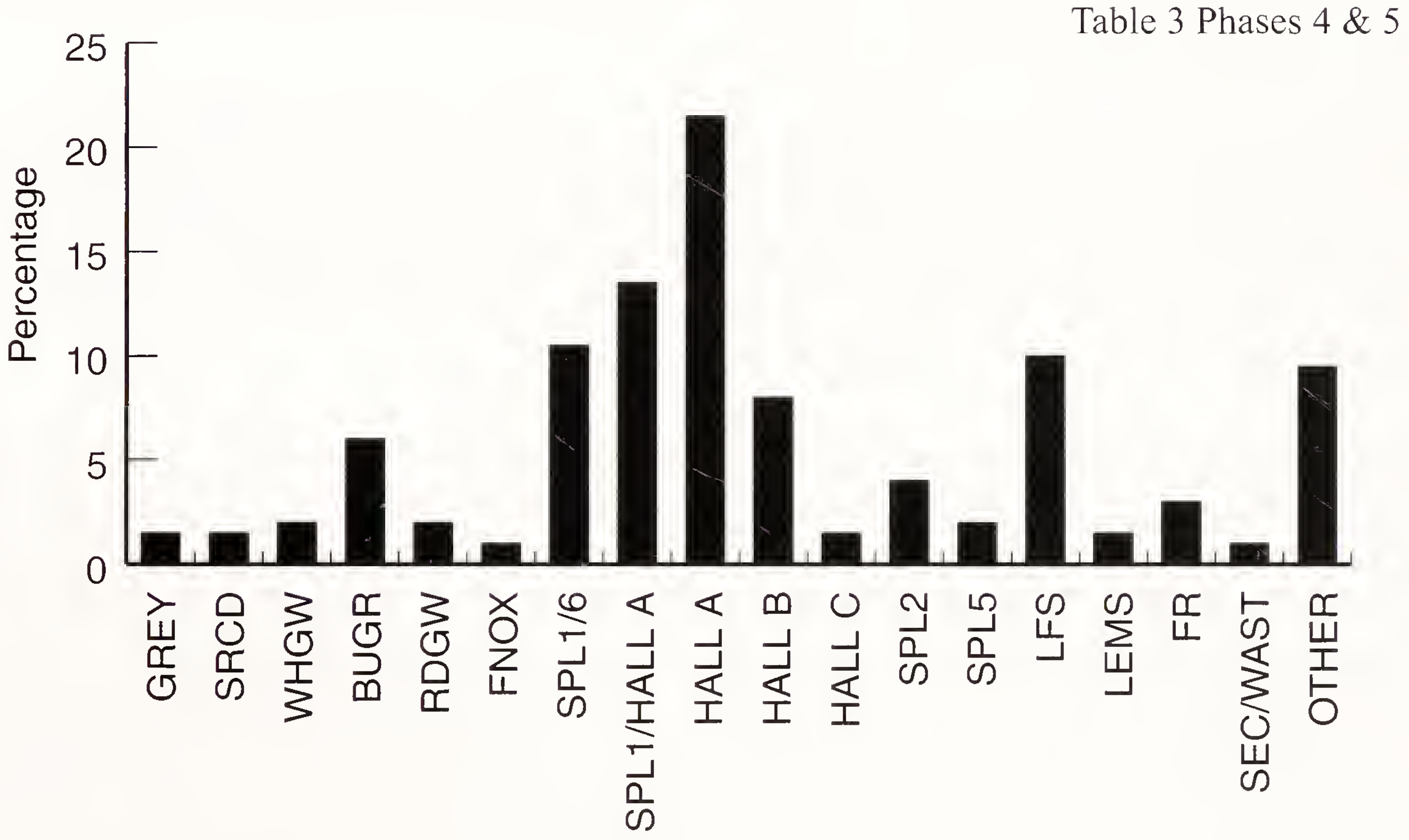


Table 3: Overall percentages by sherd count Phases 4 and 5

The Artefacts

Phase 4

The most significant finds from this phase are a concentration of thirty-four iron clench-bolts and/roves from the area of the draw-dock. These are most likely to result from repairs to, or the breaking up of, clinker-built ships (although clench-bolts and roves were also used on domestic structures and vehicles such as carts). There were also deposits of iron-working slag from this phase, most of which seem deliberately dumped, for example in the Tenement X gravel road surfaces.

Phase 5

The second largest deposit of slag from the site was found in this phase (a total of 15.1kg), mostly found on Tenement X. A possible smithy forge-base was also identified. Other finds which may relate to craft activity include an incomplete iron whittle tang knife (SF11805) and a stone hone (SF11578), while a glass linen smoother fragment (SF11871) and plated iron barrel padlock (SF11545) may derive from disposal of domestic rubbish. Seven iron clench-bolts were also recovered from this phase. An iron horseshoe nail (SF11778) dates from the late eleventh–thirteenth century.

PHASES 6–7: LATE THIRTEENTH–EARLY FOURTEENTH CENTURY

The Stratigraphy

Phases 6–7 saw the continued use of Tenements Y–Z, but Tenement X was subdivided into three properties labelled X1, X2 and X3 which were in excess of 5m, 5m and 6m wide respectively (Fig. 5). New timber buildings were constructed on Tenements X3–Z, and possibly on X1, and changes were made to the river frontage. The pottery evidence dated these phases to the late thirteenth–early fourteenth centuries, while the presence of roofing tile suggested a date of thirteenth century or later.

Tenement X1

A number of deposits accumulated in the tenement. A linear band of limestone cobbles at right angles to the street frontage may represent either the support for a sill-beam of a building or part of a tenement boundary wall. Although this cobble-line was sealed by some Phase 7 deposits, the alignment reappeared as a property division between Tenements X1 and X2 in Phase 8.

Tenement X2

There were a number of deposits, pits, external ovens and post- and stake-holes on this tenement, but no clear evidence of buildings. A cluster of five stake-holes and nine randomly spaced post-holes of varying sizes were present, but these did not fall into patterns suggestive of buildings and their precise function is unclear. Three rubbish pits were positioned close to the south-western tenement boundary. There was also a pit 3.4 x 4 x 0.39m in size, which was lined with post-holes 0.18 to 0.32m in diameter, implying that it originally had a wicker lining, but its original function is also unclear. A linear cut, 1.6 x 4.4 x 0.11m in size, again of uncertain function, was present which extended across the width of the tenement barring access to the river (Fig. 5).

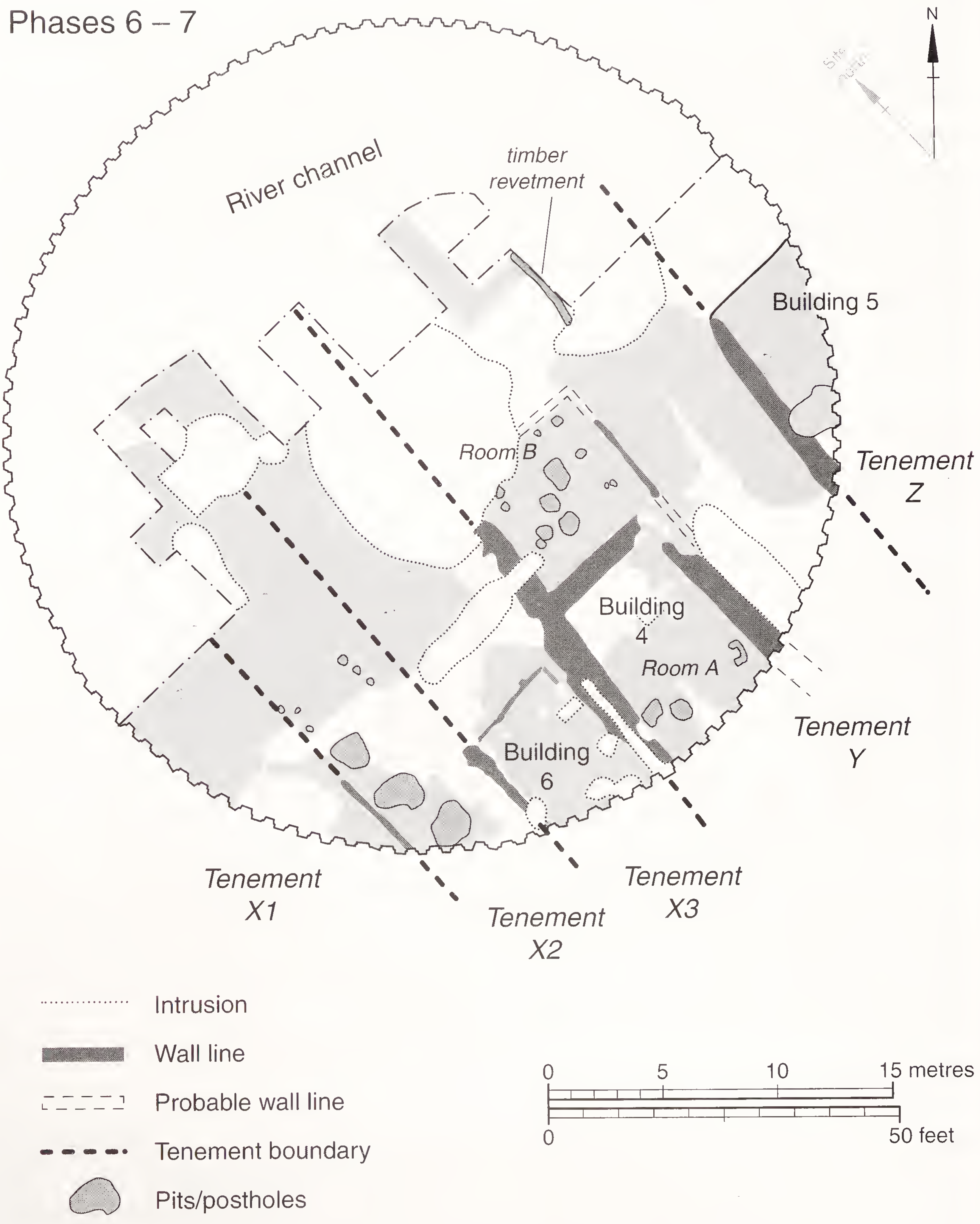


Fig. 5: Phases 6–7

An external hearth, together with an associated deposit of burnt sand, ash and charcoal, was present towards the rear of the tenement. This hearth was replaced by an external oven (rebuilt once). Soil samples from the oven contained a large assemblage of charred grains and suggest that it was a corn-drying oven (Fig. 6).

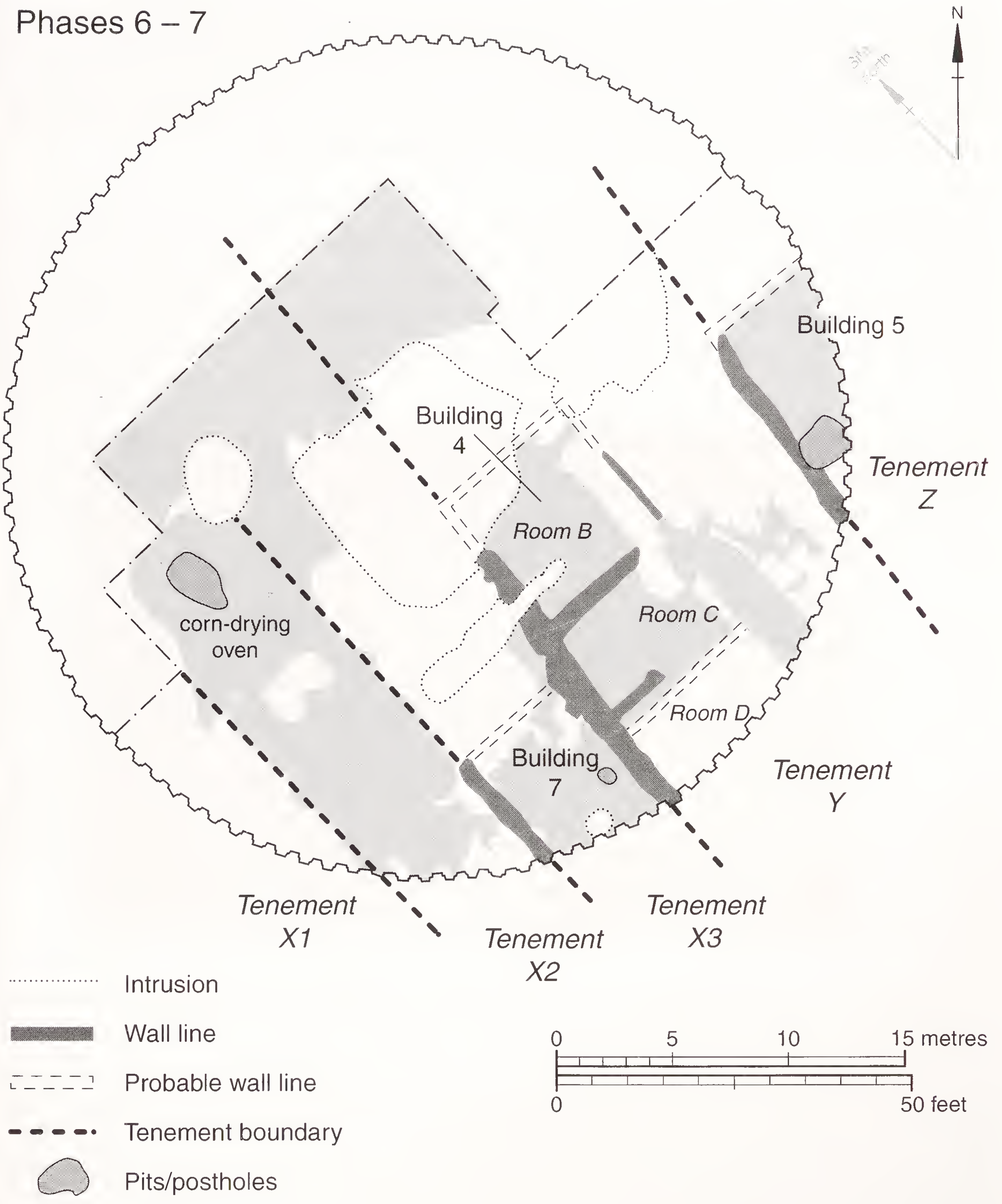


Fig. 6: Phases 6–7

Tenement X3

Adjacent to the street frontage there were a number of pit cuts, randomly spaced post-holes and dumped deposits. Analysis of soil samples from one of the dumped deposits revealed food debris (including fish bones and cereal grains) although, as explained above, this may not imply domestic occupation nearby. These features were sealed by a timber building (Building 6, Fig. 5) which was c.5m in width. A carbonised beam in the north-western wall suggests that this building burnt down. No internal surfaces associated with the building were found.

Building 6 was replaced by Building 7 (Fig. 6) which was also 5m wide. The north-western wall was represented by a sill-beam, the south-western and north-eastern walls by beam-slots. The configuration of a floor deposit implies that there was a doorway at the north-eastern corner of the building, giving access to the tenement yard. An area of burnt clay, located under the ridge line of the building close to the north-western wall, represents the remains of a fire lit directly on the floor of the building. Fifteen stake-holes and a post-hole were identified within the building; they presumably related to internal fittings, but did not fall into any patterns suggestive of screens or partitions. Building 6 and its replacement Building 7 both presumably had a single room at ground level, since there was insufficient space for multiple rooms between their rear walls and the street frontage.

A timber plank 1.09 x 0.27 x 0.02m was placed to the immediate south-west of the draw-dock, perhaps in an attempt to shore up the draw-dock wall. The draw-dock itself seems to have rapidly silted up, before being sealed by a stony deposit. This would have provided some degree of stability to the river bank, but would not necessarily have given easy access to the waterfront. The stony deposit was in turn sealed by dumps including a charcoal-rich deposit, which may imply either industrial activity nearby or the dumping of remains from Building 6, which had burnt down. Cut into this deposit were a number of rubbish pits and randomly spaced post-holes.

Tenement Y

Building 2 was replaced by a new structure, Building 4 (Fig. 5), 8.0 x 15.5m in size. The wall on the south-eastern side, together with an internal wall dividing the building into two rooms, was of sill-beams above clay banks, while on the north-east the sill-beam was above a line of roughly hewn limestone blocks. The sill-beam on the north-western side seems to have rested directly on the ground. The south-eastern room (Room A) measured at least 8.3 x 6.5m, while the north-western room (Room B) was 6 x 6.5m. The internal area of each room was levelled to create an even surface.

Within Room A, a sill-beam for an internal partition was located c.1m south-west of and parallel to the north-eastern wall of the building, suggesting that an internal corridor ran along the north-eastern side of the building. A gravel deposit at the north-western end of this corridor implied that there were three doors, leading into Rooms A and B and into the tenement yard. A succession of floor surfaces interspersed with post-holes and two hearths were found in Room A. The earlier hearth was located in the south-western portion of the room, close to but not against the south-western wall, while the later hearth was located adjacent to the south-western wall of the building. An arrangement of limestone flags, forming three sides of a rectangle 0.9 x 0.3m in size, were set into a band of clay 2.0 x 0.3m in area, close to the south-eastern corner of Room A. The function of this feature is unclear; it may have been intended as a fire-back, though no traces of burning were associated with it. In Room B there were four post-holes ranging from 0.1 to 0.5m in diameter and 0.1 to 0.47m deep arranged in a rectangular pattern within the room. Adjacent to two of the post-holes were two limestone pad-stones. These presumably carried vertical posts to support the roof of the building and imply that it was a single-storey structure. Patches of burning across Room B suggest that fires were periodically lit directly on the earth floor.

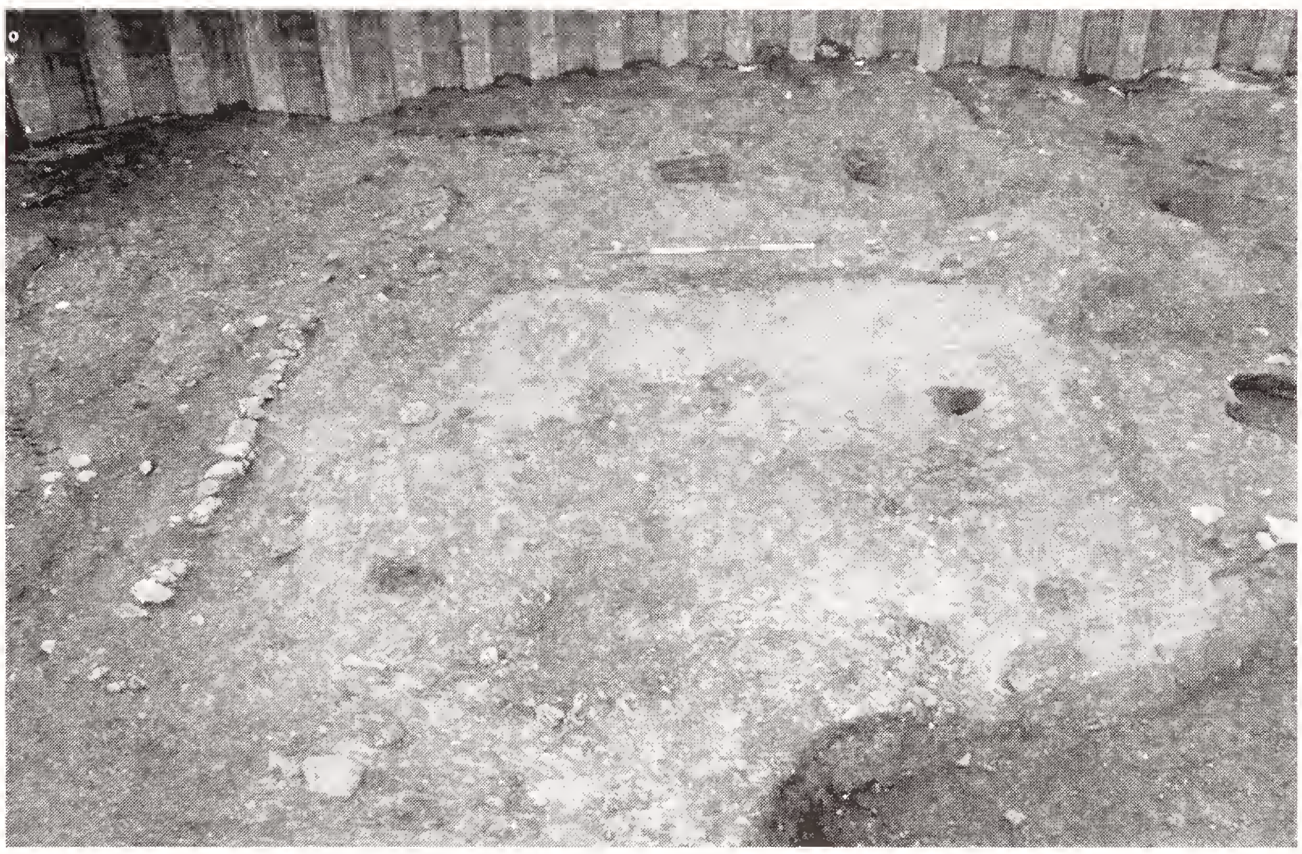


Plate 2: Building 4 facing south-east, Room B in the foreground, and the clay bank dividing Rooms A and B beneath the scale.

Room A was later subdivided by the insertion of a partition wall above a sill-beam, creating two smaller rooms, labelled Rooms C and D (Fig. 6). A post-hole in the northern corner of Room C and another cut into the clay bank foundation of the western corner of Room C were presumably for internal fixtures. New earth floors were laid in Room B, sealing the earlier post-holes and post-pads and thus implying that the initial supports for the roof had been removed, and possibly therefore that the building was reroofed. Two hearths were located in the north-eastern quarter of the room.

To the immediate north-east of Building 4 was a tenement yard surface of clayey-sandy-silt and a number of structural elements including eight stake- and post-holes and a linear band of limestone fragments set into clay. It is possible that these represent some kind of external feature abutting Building 4. In addition, there was a small pit of uncertain function (Fig. 6).

Subsequently, two cuts 3.0 x 5.0 x 0.29m and 6.5 x 2.0 x 0.54m in size removed much of Room D, including parts of its south-western and north-eastern walls. A linear cut, measuring 2.5 x 0.6 x 0.2m, with an integral post-hole at the northern end may represent a new south-eastern wall for Building 4 (Fig. 6), in which case the building would not have fronted onto the street at this stage.

After further silting took place within the river inlet, a length of timber revetment was inserted adjacent to the earlier Phases 4–5 riverside wall (Fig. 5). This revetment was 4m long and 0.66m high, and was made from two lengths of articulated planking from a single clinker-built boat, together with a timber interpreted as being part of a static smithing bellows and a plank, all held in place by two upright posts. This revetment could represent either a replacement for the earlier riverside wall or a protective fender for boats drawn up against the wall. A small length of wattle, which could not be excavated due to lack of time, must also have been a riverside feature. Although insufficient tree-rings were present to enable dendrochronological dating on any of the timbers from this feature, the use of waterproofing rolls of cattle hair dipped in tar suggests that this boat was of a somewhat later date than the boat timbers used in the Phases 4–5 waterfront (Allen *et al* 2005, 299). A detailed description of the timbers in these revetments is available elsewhere (*ibid*, 2005).

Dumping took place adjacent to the river (Fig. 6) which sealed the earlier Phases 4–5 timber revetment on the main river channel, showing that it had gone out of use by this stage.

Tenement Z

Building 5 (which replaced Building 3) measured at least 11 x 7m; a clay bank 1m wide and c.0.4m high on its south-western side is interpreted as supporting a sill-beam. The interior of the building was levelled, and a deposit of river cobbles 4 x 1m in extent may represent the patchy remains of a floor surface, subsequently sealed by a series of sand and gravel floors. A pit was dug into the southernmost corner of the building, but it is unclear if this represented an internal feature or whether the building had gone out of use by the time it was dug.

The Pottery

There are discernible changes in the relative proportions of different wares during these phases, although the character of the assemblage remains domestic. A wide range of forms is present with jars, pitchers and bowls being augmented by skillets, pipkins and jug forms as well as a possible urinal, cauldron and curfew.

The Hallgate industries now account for well over half of the assemblage (Table 4). Hallgate A-type fabrics account for about 40% of the wares while Hallgate B accounts for just over 20%; Hallgate C wares account for less than 1% and are included with the 'other' category. If, as is believed to be the case, the Hallgate A wares have been in production for over a century by this time, these totals must include a proportion of residual sherds which might serve to inflate the totals.

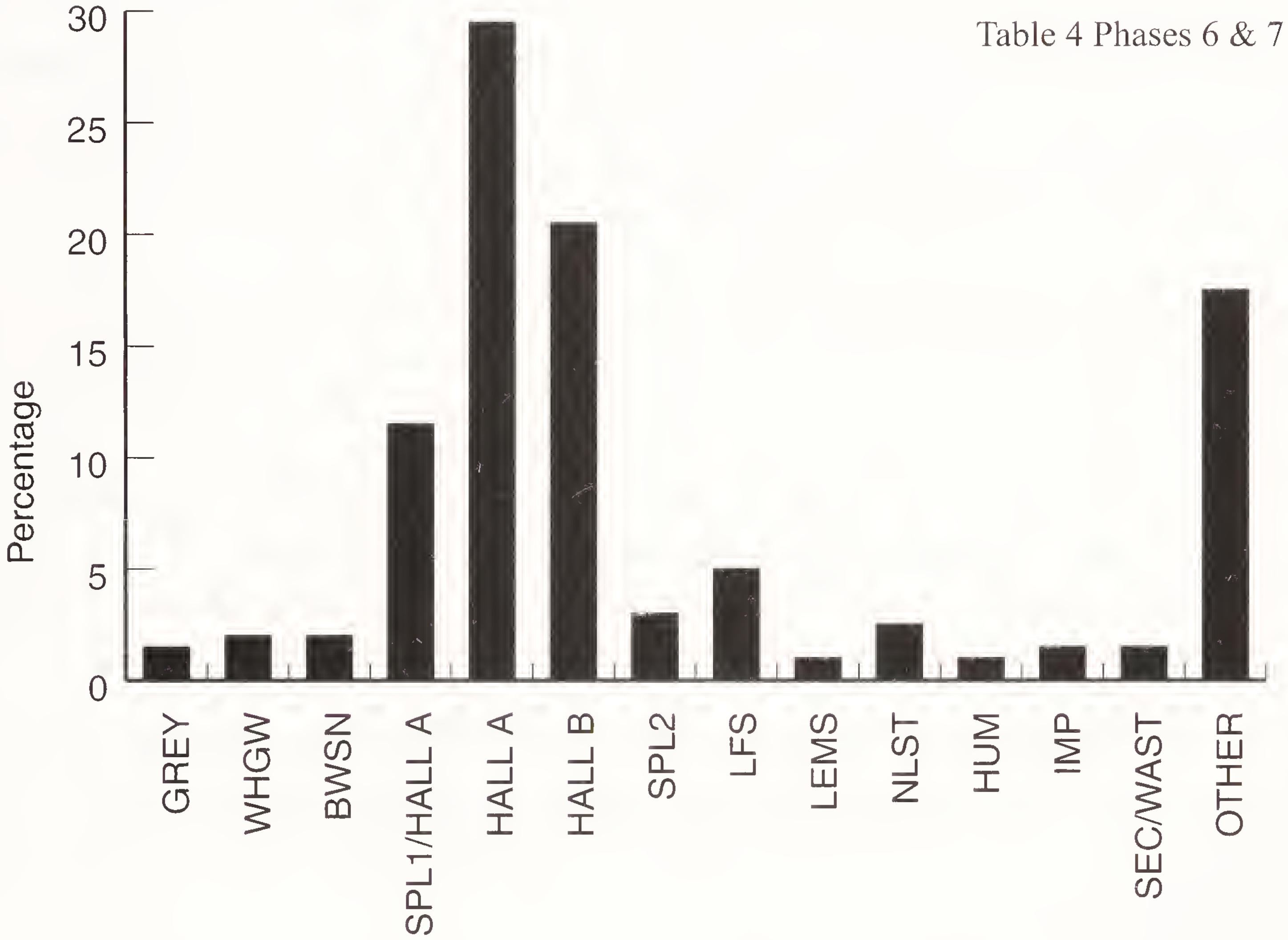


Table 4: Overall percentages by sherd count Phases 6 and 7

Again it is evident that this local commercial success is at the expense of the shell-tempered wares, which now account for just fewer than 9% of the total. Over half of these are Lincoln fine-shelled ware which must be residual by this time. Local early medieval shelly ware account for about 1%, but by this time North Lincolnshire shelly wares are in production and show a continuation of this supply route, although shelly wares account for a very small percentage of the whole from the site.

Local, regional and occasional foreign imports from the sources described above continue to be recovered in small quantities throughout. A few sherds of Humber ware and the white coal measure fabrics make an appearance in Tenement X and in waterfront deposits, as do a small number of the North Yorkshire Brandsby-type wares. Rouen and Saintogne wares are present in very small quantities. The continued presence of small amounts of waster/second material is evidence that the movement of soil in and around the site continues.

Minor wares (less than 1% and incorporated into 'other' wares on Table 4) also include small quantities of various types of splashed, gritty, sandy and shelly wares as well as Scarborough ware and Tees Valley wares. Small amounts of imported French wares and Low Countries red wares are also included.

The Artefacts

Phase 6 produced the largest concentration of slag from the site (84kg), with 80kg dumped in a single deposit (SF11786, context 2654) in Tenement X3. Interpretation of this deposit by Dr Gerry McDonnell is that it may have derived from a smithy building on the earlier Tenement X, although there is a dearth of associated vitrified hearth lining (a total of only 65g); this material is typically found close to a smithy, and might be expected to be found in quantity.

A deposit of nine clench-bolts and/or roves (SFs11621–29) was recovered from a dumped deposit used in alterations to the draw-dock. Other finds from Tenement X3 included a silver coin (SF11516) of King John (c.1204/05–1208/09), and a possible gilded copper-alloy belt fitting (SF11329) found in pit backfill. A plated iron key for a mounted lock (SF11861) is likely to be of twelfth- to thirteenth-century date, and was found in association with Building 7. In Tenement Y, a substantial iron hinge strap (SF11593), an iron horseshoe fragment (SF11793) and an eleventh- to thirteenth-century horseshoe nail (SF11564) were also found.

Phase 7 finds in Tenement X3 include an iron whittle tang knife (SF11987), a stone hone (SF11439) and stone quern fragment (SF11704) all found in hearth use deposits, which appeared to derive from cooking. Other finds from this tenement include a bone needle (SF11247) and an eleventh- to thirteenth-century horseshoe nail (SF11298).

A deposit of kitchen waste associated with Building 4 in Tenement Y contained numerous finds including a tinned iron buckle (SF11422), a stone quern fragment (SF11758), a stone hone (SF11420), and thirteenth- to fourteenth-century horseshoe nail (SF11689) and horseshoe fragment (SF11744). An iron key for a fixed lock (SF11350) and two further stone quern fragments (SF11756 and 11757) were also recovered from Building 4.

PHASES 8–9: FIRST HALF/CENTRAL DECADES OF THE FOURTEENTH CENTURY

The Stratigraphy

The earlier tenements continued in use, though the boundary between Tenements X3 and Y was far from straight at this stage. New buildings were constructed in Tenements X2, X3 and Y, but any buildings in Tenements X1 or Z were beyond the limits of excavation (Fig. 7). The pottery dated these phases to the first half to central decades of the fourteenth century.

Tenement X1

Several fragmentary linear bands of cobbles set in clay, a short length of drystone walling, a linear arrangement of eleven stake- and post-holes, and a separate line of three post-holes were present along the boundary with Tenement X2, with a short linear cut at right angles to the tenement boundary, located at the limit of excavation. The area defined by these contained silty-clay deposits. These features can be interpreted either as the walls of a building or as boundary features, but the latter seems more likely, given that other contemporary buildings were constructed with sill-walls. Assuming that these features do represent tenement boundaries, they imply that Tenement X1 was subdivided into a tenement fronting onto Low Fisher Gate and a second tenement to the north-west fronting onto the Common Shore.

Tenement X2

Building 12 was constructed fronting onto the street, but as so little of this building was found within the excavated area its precise form is unclear, though it presumably had a single room at ground level. The boundary features noted above between Tenements X1 and X2 were removed and sealed by various dumps; a rubbish pit was present in the tenement yard. Soil samples from three contexts in the tenement contained food remains (fish bones, cereal grains, cattle bones, hazelnut shells and, possibly, peas).

Tenement X3

Building 10, which replaced Building 7 and presumably had a single room at ground level, comprised a south-western wall of roughly coursed limestone blocks bonded with sand. There were no clear remains of walling on the north-western side; the north-eastern wall may have been marked by a narrow line of silty-sand and limestone rubble or could have butted up against Building 9 in Tenement Y. Within this building there were a number earth floors; a wear-hollow running almost diagonally across the room suggests the location of the doorways at the front and rear of the building. One cobble hearth was located in the south-eastern portion of the room and a second hearth (not illustrated) in the western portion of the building.

The building was later remodelled by the insertion of new sill-walls of limestone fragments and cobbles bonded with clay on the north-western and north-eastern sides. A post-hole and post-pad made of a reused voussoir, inserted 0.9m south-east of the north-western wall of the building, were presumably for internal fixtures. Patchy stony deposits may represent an attempt to even up the floor surface.

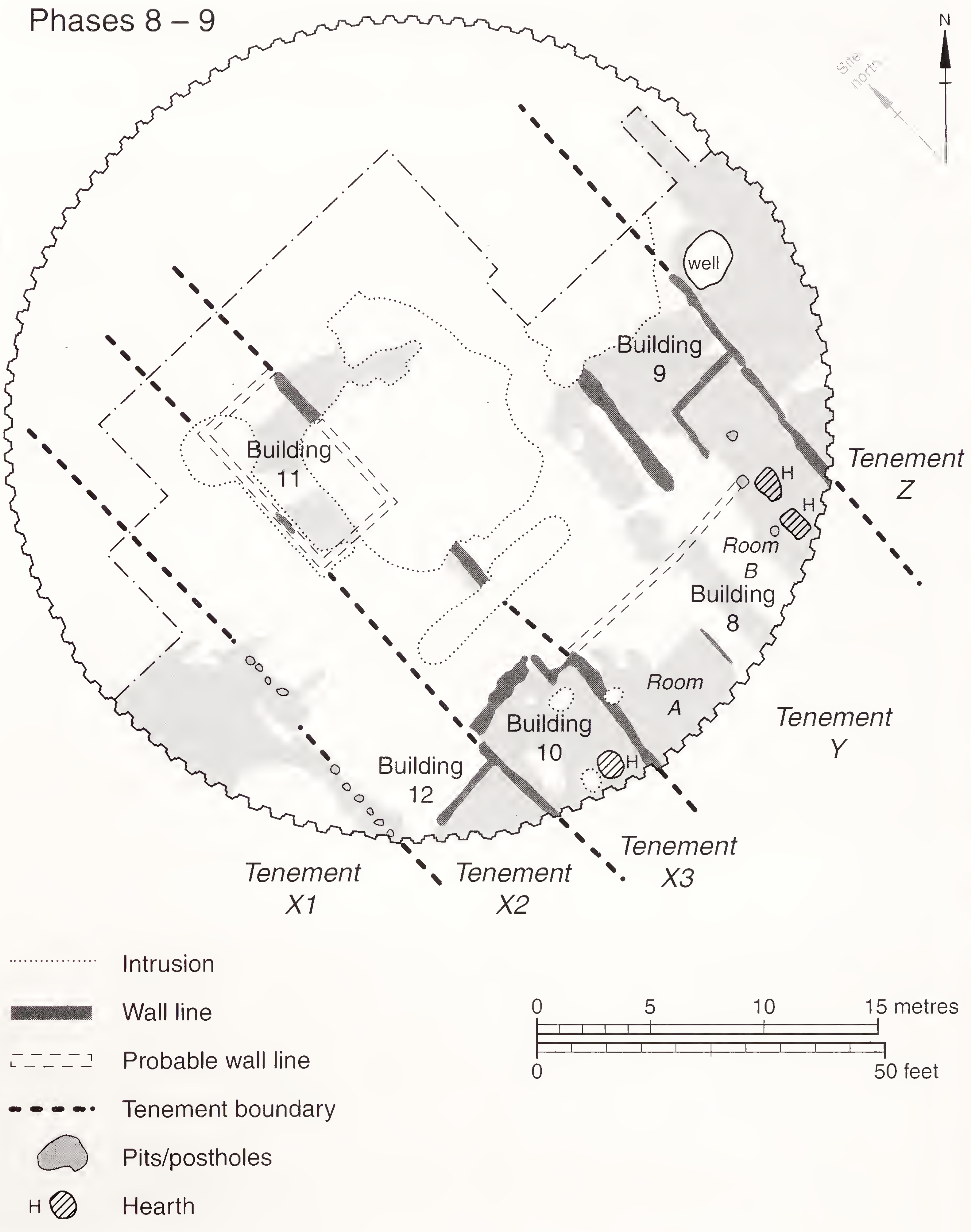


Fig. 7: Phases 8–9

A third hearth, inserted into the eastern portion of the room, was later renewed.

In the northernmost corner of the Building 10 there was small right-angled wall which was bonded into the south-western wall of Building 9 in Tenement Y, together with an associated post-hole. The arrangement of these features suggests the position of a doorway, with the post-hole supporting the door-post. Incorporated into this wall were two reused architectural fragments which originally came from chamfered rebated jamb (AF72) and possibly from a string-course or window-sill (AF76). These architectural fragments seem to have come from a building of far higher status than any seen on the Low Fisher Gate site, possibly from the nearby demolished castle which had certainly gone out of use by 1220.

Building 10 underwent further alterations; a robber trench removed part of the north-eastern wall of the building, which was replaced by a sill-beam. Various layers containing rubble were deposited within the building, presumably to level up the surface. A spindle whorl (SF11024) was recovered from one of these contexts, which may imply that spinning was taking place here.

A second single-roomed building, 8.0 x 5.5m in size, was constructed at the northern end of the tenement (Building 11). Only portions of insubstantial north-eastern and south-western sill-walls survived due to later robbing; there had been an earth floor. The building was later robbed out and sealed by dumps of rubble.

A roughly coursed north–south drystone wall 0.5 x 0.3m in area probably represents part of the boundary wall between Tenements X3 and Y.

Tenement Y

A new building with stone sill-walls was constructed (Building 8) that extended the full width of the tenement. All that remained of this building were two lengths of parallel drystone walling, 0.5–0.6m wide and 0.2m high, 14m apart. A single reused burnt stone was built into the north-eastern wall; the south-western wall was repaired at some stage with a new length of walling which was later burnt in situ on the north-eastern, i.e. interior, elevation.

Building 8 did not remain in use for long before being replaced or adapted into a new L-shaped building (Building 9), again extending the full width of the tenement but with a wing 3.8 x 4.0m in size at the rear on the north-eastern side. The walling from Building 8 was reused in this building. Little survived of the external sill-walls of Building 9, which were bonded with sand and clayey-silt. The building was divided into two rooms (A and B) by a corridor defined by two partitions 2.2m apart. The north-eastern of these partitions was represented by four post-holes, the south-western partition by three stake-holes and a timber 1.8 x 0.02 x 0.04m in size, laid on edge. The south-western partition was later replaced by a new partition consisting of seven aligned stake-holes. A wear-hollow developed in the corridor and continued into the yard beyond. Sequences of earth floors accumulated in both rooms; in Room A there were twenty-six stake-holes arranged randomly, while within Room B there were two post-holes, all presumably for internal features. A currier's knife (SF11331) and a hone (SF11634) were found in a floor surface within Room B; curriers dress and colour leather after tanning, and the knife suggests that leather processing took place in the area.

A series of silty deposits accumulated immediately outside the building, and a hearth, 2.60 x 2.0 x 0.16m, of reused roof tiles set on edge in clay, lay immediately to its north. This seems to have been an external hearth but, curiously, it was better constructed than any of the internal hearths. A severely truncated cut, possibly a rubbish pit, was located close to the river; it was sealed by a scatter of limestone rubble that built up against the eastern side of Building 11 in Tenement X3, and which could represent either a dump or material derived from the demolition of Building 11.

During Phase 9, Building 9 underwent a series of alterations. The wear-hollow in the dividing passageway was infilled and the walls of Room B repaired by a new length of drystone walling. Room A contained a complex sequence of dumped deposits and fragments of walling, post-holes and stake-holes which made little sense in plan, but collectively may imply that the north-western wall of this room was demolished and rebuilt on a couple of occasions. Hones were found in Room A (SF11067) and Room B (adjoining fragments SFs11187–89 and 11440), perhaps suggesting an industrial function for the building. A stone-lined gully was dug parallel to the northern wing, presumably for drainage from the building to the river channel.

The original north-eastern wall of Room B was replaced by a sill-beam, against which a series of deposits were dumped, some of which seem to have been burnt in situ. Within the yard there were a number of features including an external hearth, a domestic rubbish pit, two post-holes, two linear cuts, and two clay-lined pits each 1m in diameter and 0.19m deep which were located adjacent to the south-western tenement boundary. The clay-lined pits were later replaced by identical features. Their original function is unknown, but they contained frog bones (presumably the frogs fell into the pits and could not escape). The pits were later infilled and sealed by dumps of silty-clay.

Tenement Z

A linear trench filled with compact clay may represent a foundation for a boundary wall. Various deposits, including sand, stone and gravel surfaces, were laid within the tenement. A stone-lined well was constructed by the excavation of a cut, within which a roughly coursed, circular stone shaft, 1.4m in diameter and 0.3m thick, was erected. Three external hearths (not illustrated) were found. The first was a cut 3.0 x 2.0 x 0.1m, while the second was 1.0 x 0.5m and was later replaced by a similar hearth. The third hearth reused the foot end of a child's stone sarcophagus, probably of Roman date (AF63), as the fire-back. The sarcophagus fragment was 0.87 x 0.66 x 0.37m in size and was 0.26m deep internally.

Plate 3: A Roman stone coffin reused as a hearth-back

The Pottery

The activities associated with the construction of new buildings and the modification of existing properties, as well as their subsequent occupation, produced a range of pottery which continues the pattern seen in previous phases. New forms include lamps, curfews and a range of jug forms from this essentially domestic assemblage.

Although broadly the same range of material was recovered, there are changes in emphasis (Table 5). The Hallgate products, principally Hallgate A wares, still dominate the assemblage, although this total must include some residual material. Hallgate B is a less significant element and Hallgate C occurs in very small amounts (included in 'other').

The precise dating of these phases is difficult and a degree of uncertainty remains. It is generally believed that pottery production in Doncaster declined in the course of the early fourteenth century (Buckland *et al* 1979, 56; Hayfield 1984, 43). If this is the case then there are three alternatives for understanding the dating of these phases:

1. The phases belong to the central decades of the fourteenth century and the majority of the Hallgate material is residual.

2. The correct date for the phase is twenty to thirty years earlier and the Hallgate material is largely contemporary.

3. The phases are indeed mid-fourteenth century and Hallgate pottery production continued into the central decades of the fourteenth century, and only part of the Hallgate peaks shown in Table 5 are residual.

A description of other finds is summarised immediately below but includes few chronologically diagnostic items. These points are discussed in more detail later in the Pottery Report.

Once again a little help is offered by the smaller groups of pottery. There is an increasing proportion of North Lincolnshire shelly wares (whose currency is c.1120–1400; Young and Vince 2005, 275) and the first occurrence of shell-tempered wares from Potterhanworth, which was produced from the early/mid-thirteenth century to the late fifteenth century (*ibid*). Both, therefore, are current in the later thirteenth and fourteenth centuries. Humber wares continue to rise slowly but are not yet an important component of the assemblage and there are

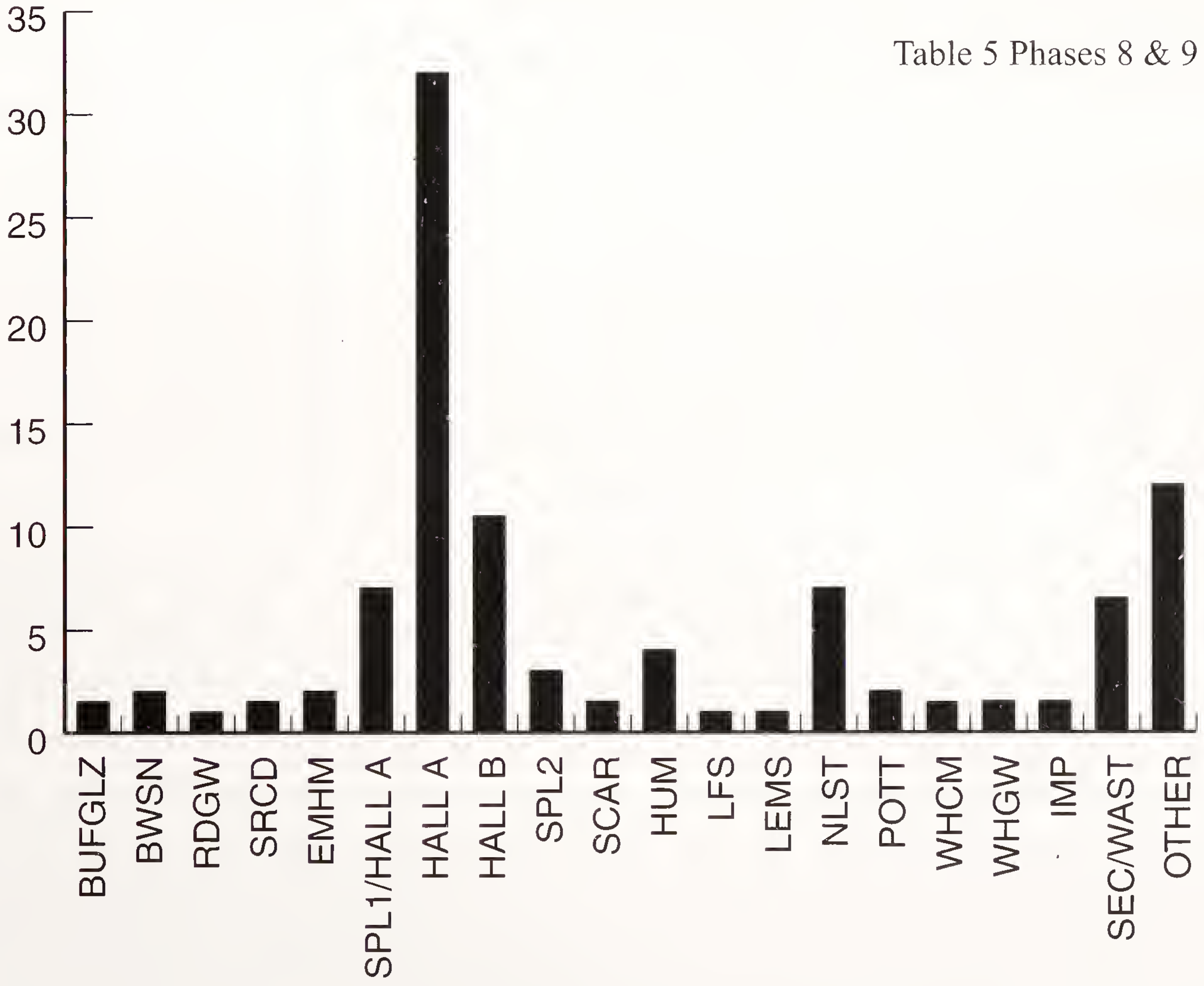


Table 5: Overall percentages by sherd count Phases 8 and 9

also one or two sherds of early coal measures white wares, as well as less than 1% of the purple coal measure types.

French imported wares include Saintogne and Rouen wares, some possibly residual, while contemporary imports include a small amount of mid-/late fourteenth-century Low Countries red wares.

Wasters/seconds account for 6.5% of the assemblage, suggesting continued earth-moving activities in the immediate area or further importation of waster-bearing soil from elsewhere in the city. There is also clearly residual earlier material, some of which makes up the total of 'other' wares and includes various types of gritty, sandy and splashed wares.

The question remains, therefore, whereabouts in the fourteenth century these phases belong. A combination of dates from the pottery and from the finds suggests they belong to the early years of the fourteenth century, but it remains possible that the activities continue into the central decades, with the concomitant possibility that Hallgate A ware production continues beyond the early fourteenth century.

The Artefacts

Phase 8

An internal floor in Building 9 on Tenement Y produced a probable currier's knife (SF11331) and a hone (SF11634), suggesting the preparation of leather may have taken place here or nearby. The same deposit also produced a lava quern fragment (SF11707) and a horseshoe nail of the late eleventh–thirteenth century (SF11642). A stone object was found in two separate pieces in two superimposed contexts (SF11372, and SF11369). Fragments of sandstone querns (SFs11603–04) were found reused in a stone-lined gully.

In Tenement X3 an iron arrowhead (SF10963), perhaps used in hunting and of twelfth- to fifteenth-century date, was recovered from a charcoal layer associated with a hearth in Building 10. A medieval type of ceramic spindle whorl (SF11024) was found in association with Building 10. A silver coin of c.1204/05–1208/09, and out of circulation by 1247, was found in a yard surface in Tenement Z, which also produced possible pottery wasters and a thirteenth- to fourteenth-century horseshoe fragment (SF11681). Clench-bolts and roves continued to be recovered from deposits of this phase; for example, four clench-bolts were found in a cut fill.

Phase 9

There are indications of lead-alloy working in this phase, with sheet fragments and run-off found in an external deposit close to Building 9. Similar material was recovered from a dump, which also produced nails, a hinge pivot (SF11149) and a late eleventh- to thirteenth-century horseshoe fragment (SF11147). Further thirteenth- to fourteenth-century horseshoes and horseshoe nails were found throughout contexts of this phase (e.g. SFs10960, 11075, 11455, 11234, 11452, 11463, 11230, 11645, 11177 and 11026). An extensive dump in the yard of Tenement Y produced large amounts of mixed material, including personal items such as a thirteenth- to fourteenth-century annular gilt brooch (SF11170), a plated iron padlock key of eleventh- to thirteenth-century date (SF11196) and a copper-alloy buckle fragment (SF11197), as well as the horseshoe nails (see above) and iron structural fittings, such as a strap or bracket (SF11172), spike (SF11204) and numerous nails.

A few tools were recovered from deposits of this phase including two hones (SF11067, and adjoining fragments SFs11187–89, 11440) and a fragment of iron shears (SF11306), all from within Building 9. Late twelfth- to early thirteenth-century silver coins from this phase comprise SF11194 (from a hearth), SF11079 and SF11080 (both from dumps). Residual Roman finds including a silver coin (SF11218) and glass fragment (SF11610) were also retrieved.

PHASES 10–13: CENTRAL DECADES/LATE FOURTEENTH CENTURY

The Stratigraphy

Tenements X3 and Y seem to have been merged into a new wider Tenement X3/Y and a new L-shaped building was constructed within this (Fig. 8). A new building was also constructed in Tenement X2. Any buildings in Tenements X1 and Z must have been located to the south of the excavation area. Phases 11–13 represent the continued use of the Phase 10 tenements, including internal alterations to the buildings. The pottery suggests that these phases date to the first half of the fourteenth century, the presence of an Edward I or II halfpenny of c.1280–1317 confirming this dating.

Tenement X1

Several features were interpreted as the north-eastern tenement boundary, including a linear cut and linear bands of silty-clay; in addition, a linear cut was located at right angles to the tenement boundary. These features collectively seem to continue the pattern of tenement boundaries seen in Phases 8 and 9, i.e. with a Tenement X1 fronting on to the street and a second tenement to the north-west fronting onto the Common Shore.

Tenement X2

A new building (Building 14) with sill-walls of roughly coursed, roughly dressed limestone, with occasional cobbles and sandstone blocks, was erected. No trace of

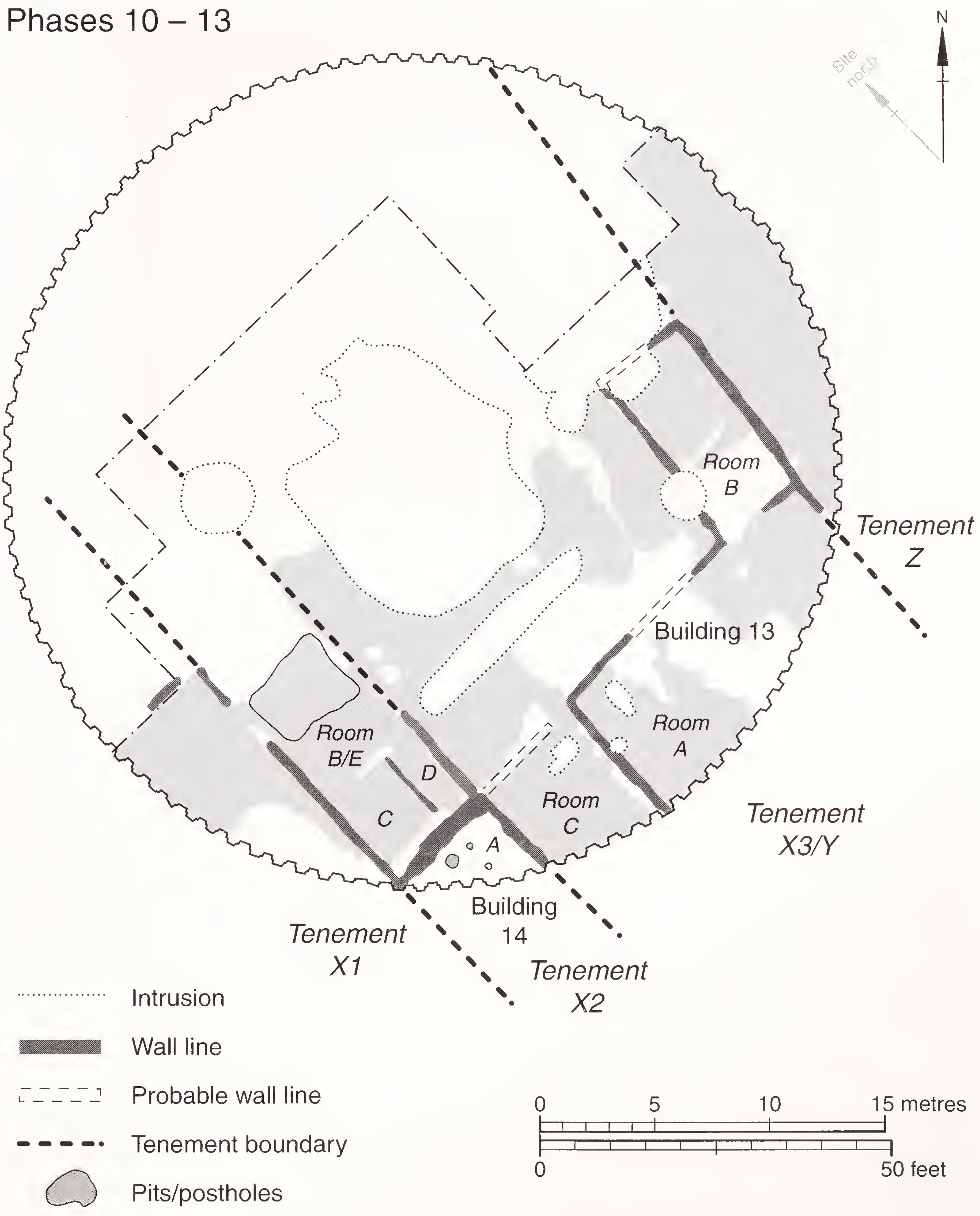


Fig. 8: Phases 10–13

the north-western wall was found, due to later truncation, so the precise dimensions of the building are unclear. A cross-wall divided the building into two rooms (A and B), with Room A being adjacent to the street frontage. In Room A were three post-holes presumably for internal fittings.

Building 14 underwent two phases of alterations. Initially, the external walls of the building were repaired with short lengths of drystone walling. In addition, a clay bank was inserted which overlay and replaced the earlier internal dividing wall; presumably this supported a new sill-beam. Internal surfaces accumulated to either side of this new wall.

The second phase of alterations saw the subdivision of Room B into three smaller rooms (C–E) by the insertion of a sill-beam, a beam-slot and an associated post-hole. Doors adjacent to the north-western and south-eastern walls of the building gave access between the rooms. Within Room C was a pit, 2.0 x 2.2 x 0.35m in size, the function of which is unclear. Room D seems to have been a corridor with a rubble floor which provided a more durable surface in this area. The south-western wall of Room D aligned with the two post-holes in Room A, which may imply that this corridor continued through the building to the street frontage. Rooms C and D were later merged into one larger room and sealed by further internal earth floors which were cut by two post-holes that presumably related to internal fittings. Room E was demolished at some stage, though rooms A, C and D seem to have continued in use. A large rubbish pit was dug in the tenement yard and a linear hollow indicated heavy wear between Room D and the pit, perhaps implying that the pit was for the disposal of waste from the building.

Tenement X3/Y

An L-shaped building (Building 13) was constructed across the full width of the tenement, i.e. 19.5m wide, with a northern wing of 4.0 x 8.4m at the rear on the north-eastern side. The sill-walls of the building were made from randomly coursed limestone, some of which was of drystone construction while some had a sandy-clay bonding. The walling reused the surviving walls of Building 8, a post-pad from Building 9 and a post-pad from Building 10. Within the walls there were also reused quern stones, burnt stones (from earlier buildings or hearths on site) and flint nodules that must have originated as ships' ballast.

The building had three rooms: Room A was 13.5m wide, Room B measured 4.0 x 8.4m and Room C was 5m wide. A gap in the walling suggests there was a door between Rooms A/B in the centre of the dividing wall between the two rooms. A 3.5m wide gap in the north-western wall of Room A may suggest that the building was partially open to the elements, possibly because it was used for an industrial function which required both light and ventilation. Five hones were recovered from Room A, supporting this suggestion. No walling was present on the north-western side of Room C; this may have been robbed at a later stage, or may again represent an opening on one side of the building to provide light and ventilation for industrial processes being undertaken within the building.

Within all three rooms there were sequences of earth floors alternating with randomly placed stake-holes (ninety-eight in Room A, twenty-nine in Room B

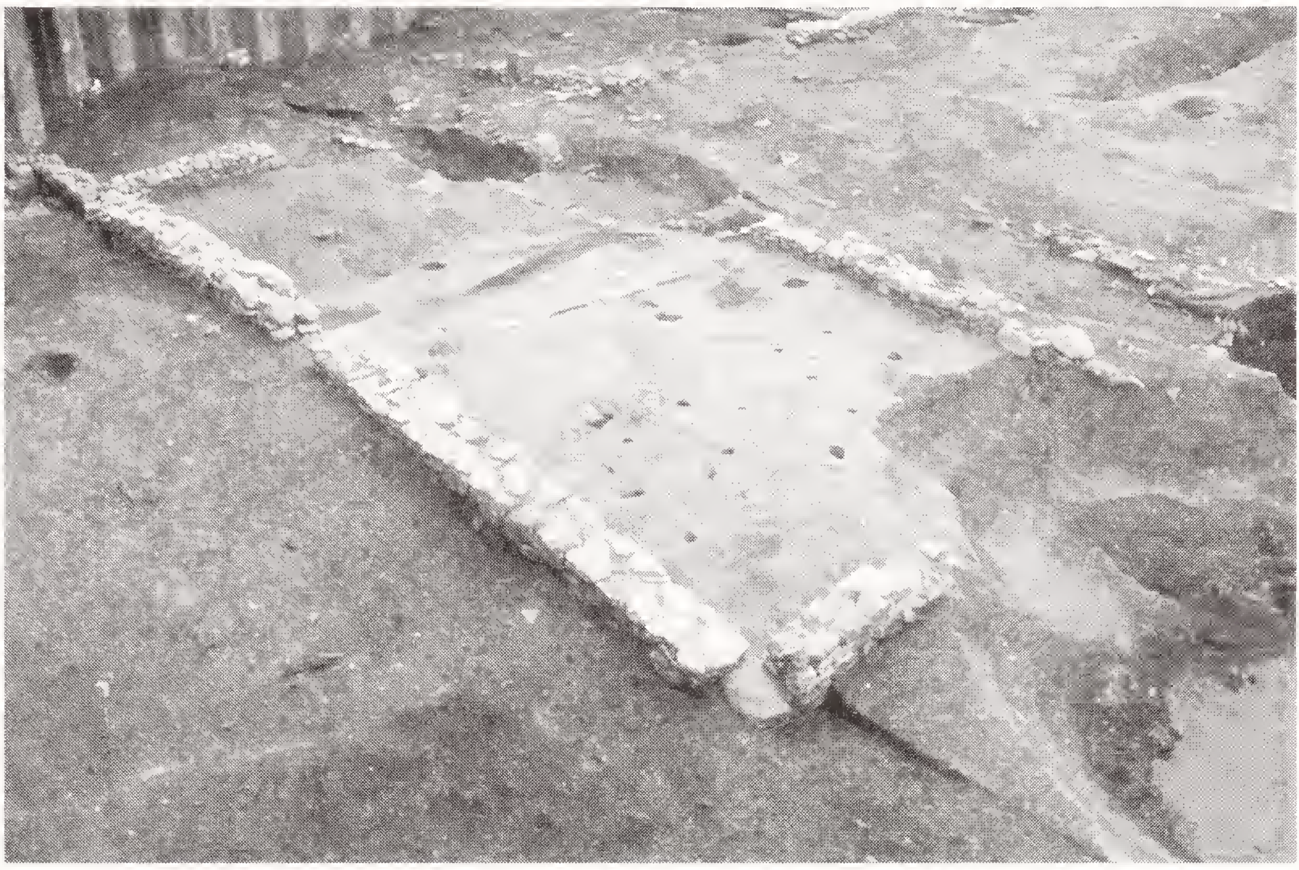


Plate 4: The northern wing of Building 13 facing south

and twenty in Room C). The stake-holes did not form any clear patterns (such as straight lines suggestive of partitions) and their precise function is unknown. A hearth in Room A (not illustrated), made of roofing tiles set in clay and edged with limestone fragments, was located towards the south-western end of the room. Two hearths were present in Room C, both in the south-eastern portion of the room. The earlier of these was of limestone fragments and millstone grit (which probably originated from querns) set in clay. The use of heathland turf for fuel is suggested by charred heather associated with one of these hearths. Food remains (cereal grains, various wild berries, and cattle and fish bones) were found in Rooms A and C. An area of gravel extending from the north-eastern corner of Room C into the yard beyond may represent a hardstanding in a doorway. There were two pits in Room C, one of which contained food debris suggesting it was a rubbish pit. Room B clearly differed in function from the other two rooms as it lacked hearths and evidence for food consumption.

Building 13 was subsequently altered (Fig. 9) and its north-eastern wall was partially repaired. Room A was subdivided into Rooms D and E by an internal timber wall above a foundation of limestone slabs bonded with clay, within which was an integral post-pad made from a reused voussoir. A gap in this wall, with a larger stone to either side, probably indicates the position of the doorway giving access between Rooms D and E, the stones representing post-pads to support a door frame. A series of surfaces deposited in Room D extended through the 3.5m wide gap in the north-western wall of the building. Above these deposits were a post-hole and post-pad (a decayed limestone block 0.5 x 0.4 x 0.05m in size). These were aligned with the doorway in the wall between Rooms D and E and may represent the line of a screen or even of roof supports.

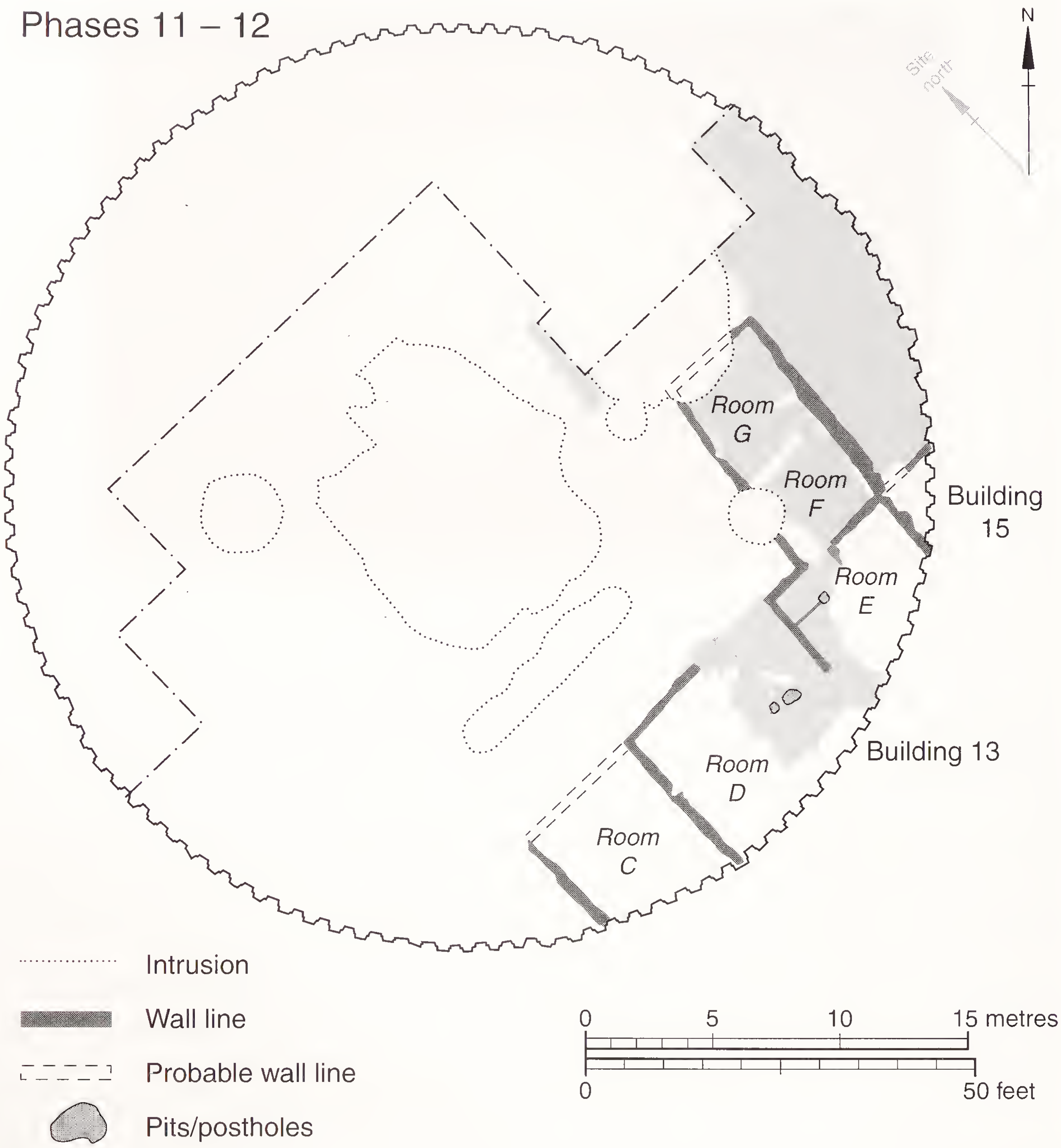


Fig. 9: Phases 11–12

Within Room E a post-pad (a dressed limestone block 0.32 x 0.3m in size) was inserted which lined up with a post-pad in the wall between Rooms D and E, and with a post-pad in the north-eastern wall of the building. A short linear cut between the post-pad in Room E and that in the internal dividing wall probably implies the location of a screen. The original door to Room B was blocked and replaced by a new door immediately to the west, with a short length of walling to the south-east which may represent all that remains of a screen.

Part of the north-eastern wall of the building was repaired, possibly as a response to severe subsidence. Room B was divided by a sill-beam into two rooms (Rooms F and G); a door between these rooms was located adjacent to the north-eastern wall of the building. Internal surfaces accumulated within these rooms. The surfaces in Room G were thicker than those in Room F, possibly to compensate for the fact that the northern end of the building was subsiding into earlier features. There were no hearths or traces of food debris in Rooms F or G.

The north-western wall of the southern range was replaced on a slightly different alignment; a stake-hole may have been associated with this repair. The wall dividing Rooms D and E was shortened so that it terminated at the in-built post-pad, and floor surfaces then accumulated within both rooms. A hearth (not illustrated) was located beneath the ridge line of the roof in the centre of Room D, and the floor of Room D was pierced by twenty-nine stake-holes that did not form any coherent patterns. Within Room E the earlier screen was replaced by a short length of drystone wall and a new earth floor was deposited, respecting this screen.

A series of internal floors accumulated in Rooms D and E. The shape of these deposits implies that a 3.5m wide gap still existed in the north-western wall of Room D. The earliest of these internal surfaces built up against the dividing wall between Rooms D and E, but the most recent deposit sealed the wall, implying that the rooms had eventually been merged.

A post-hole was dug on the line of the north-western wall of Room D, presumably to insert an additional upright, to the north-east of which was a short length of walling; these features infilled the 'gap' in the north-western wall of the room, perhaps implying that the function of the room had changed. A new internal wall foundation built from limestone blocks and river cobbles bonded with clay replaced the earlier wall dividing Rooms D and E. There was no evidence for a doorway through this wall. Further floor surfaces associated with food debris (cereal grains, cattle and fish bones, and charred pea) accumulated within Room D, and a hearth was placed in the centre of the room.

Within the yard to the rear of Building 13 there were a number of dumped deposits and a linear hollow worn along the line of access down to the River Cheswold. The hollow was later infilled and sealed by yard surfaces; a linear stony deposit may represent a path to give access to the river or a yard surface. A clay-lined pit of unknown function, an isolated stake-hole, an isolated post-hole and two small pits, presumably rubbish pits, were also present within the tenement yard.

Tenement Z

The Phase 8 stone-lined well was infilled with dumps of domestic rubbish that must have originated from nearby buildings, and the river channel located to the north-west of the tenement was partially infilled with material derived both from natural silting and by the deliberate dumping of stone rubble. An external hearth (not illustrated) was placed above the earlier well; the virtual absence of food remains in association with this hearth may imply that it was of an industrial rather than domestic nature. The hearth was later truncated by four post-holes (three in a line and one slightly to the north-east). Various deposits were dumped in the tenement yard, which contained cereal grains and burnt roofing material, implying that there was a thatched building nearby. In the original site archive some of these features were placed in Phase 9 Group 5 and Phase 10 Group 3 but were rephased into Phase 11 here due of the presence of an early fourteenth-century coin (SF11978) in one of the contexts. This is the only phasing change made to the original site archive.

A sill-wall of burnt limestone slabs bonded with clayey-silt was interpreted as the rear wall of a new structure, Building 15 (Fig. 9). Later alterations to this wall suggest that a doorway into the yard was blocked and then rebuilt. A cut 3.0 x 3.0 x 0.07m deep may represent an attempt to even the floor within the building. This is recorded as having removed the north-eastern wall of Building 13, which must have gone out of use by this stage. The rear wall of Building 15 was later replaced by two short lengths of sill-wall with an associated internal mortar floor, of which only a small portion survived.

A series of gravel surfaces were placed in the tenement yard to the rear of this building, and further natural silting occurred within the river channel. The tenement boundary wall was repaired, while a length of wall built from limestone cobbles bonded with clay may represent a tenement boundary, although it was slightly off-line with Building 13 in the adjacent tenement. An isolated post-hole with a post-packing of limestone fragments was also present within the yard.

The Pottery

Major changes in layout occurred in this and successive phases as tenements merged and further structural alterations took place. These activities inevitably caused disturbance of the buried deposits and served to add redeposited material to contemporary groups. This affects the precision with which the pottery can be used to date the phases; again the other artefacts recovered are of types which span the thirteenth and fourteenth centuries.

The number of seconds/wasters (especially in Phase 10) recovered from these layers suggests that the ceramic picture has also been distorted by the introduction of material from outside the area of excavation (Table 6). While the seconds/wasters are visible evidence of the introduction or redistribution of imported soil, other pottery types which might have been in the same soils are less obvious but will nonetheless have affected the overall percentages of the different types. In general, however, Hallgate wares, especially Hallgate A-type fabrics, still dominate but, inevitably, after two centuries of activity on the site, these totals will include residual material.

Contemporary wares include an increasing amount of Humber wares and the proportions of North Lincolnshire shelly wares decline from the earlier phases, although the Potterhanworth shelly wares reach their modest peak in Phase 11. Amounts of white and purple coal measures products increase in these deposits, especially from Phase 11 onwards when they include open forms. In terms of contemporary use it is likely that these wares are of greater significance than the table suggests. 'Other' wares include less than 1% of gritty, sandy and splashed wares, unidentified sherds and residual material.

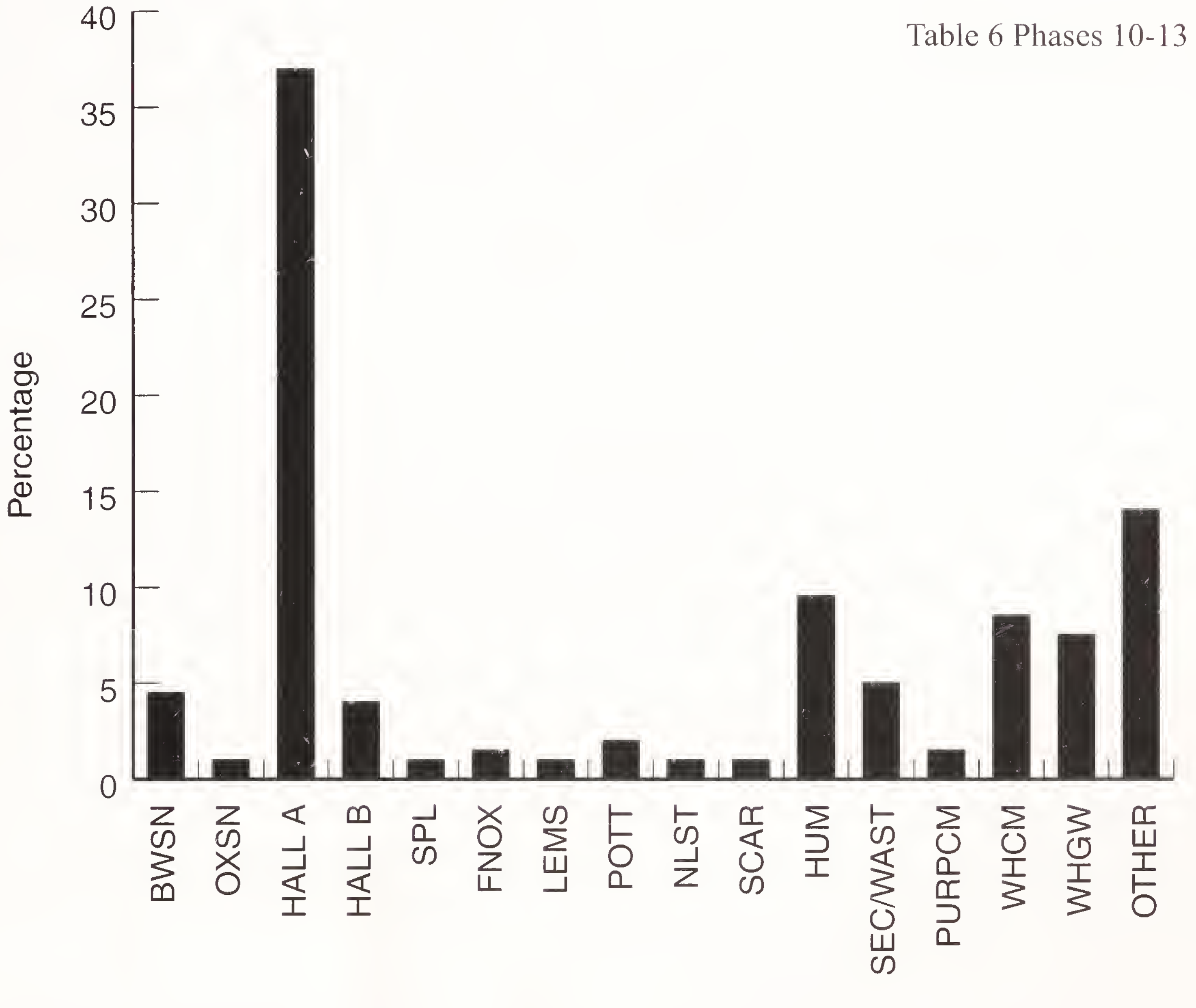


Table 6: Overall percentages by sherd count Phases 10–13

The Artefacts

Phase 10

Many finds were recovered from floor deposits in Room A of Building 13: most comprised nails, but there were also five hones (SFs11023, 10998, 11001, 11371 and adjoining fragments SFs11002–03 and11021), an early thirteenth-century coin (SF11979), a very large iron buckle (SF11008) and a hinge pivot (SF11009). Objects recovered from contexts external to Room B of the same building include two thirteenth- to fourteenth-century buckles (SFs10758 and 10775), and a socketed medieval multi-purpose arrowhead (SF11028).

The Tenement X1 garden deposit produced another iron arrowhead (SF10757), and at least eight clench-bolts and roves (SFs10726 and 10788). A further twelve clench-bolts and roves (SFs11007, 11461) were found in association with the boundary wall.

Phase 11

Most of the finds recovered from this phase derived from either dumps in the Tenement Z yard, or from within rooms in Building 13 on Tenement X3/Y. Finds recovered from dumps included two coins, one being early thirteenth-century (SF11980) and the other early fourteenth-century (SF11978). These deposits also produced a copper-alloy buckle plate (SF11174) and a possible iron horse-shoe (SF11177). Amongst finds from within Building 13 were roves and clench-bolts (SFs10857, 12017, 10807, 10893, 10690 and 10783), an iron candle holder (SF10930) and hinge pivot (SF10934), a copper-alloy belt fitting (SF10659) and a mid–late thirteenth-century silver coin (SF10661).

Phase 12

Artefacts were again found in association with Building 13, including a silver coin of the late twelfth/early thirteenth century (SF10696). Also from Building 13 were a copper-alloy bar mount (SF10740) and buckle (SF10747), stone quern fragments (SF11766) and a possible lead weight (SF10749). A large group of structural ironwork was recovered from garden soil of Tenement X3/Y which included nails, but also a padlock key (SF10699), two roves (SFs10705 and 10737) and two clench-bolts (SFs10708 and 10738). Also from the garden soil was a leather strap with mounts (SF10829), a possible touchstone (SF10830) and a copper-alloy buckle of thirteenth- to fifteenth-century date (SF10845). A silver coin of the mid-thirteenth century was found in the backyard area of Tenement X2 (SF10813). Debris from possible lead working was found scattered throughout this phase (e.g. SFs10763, 11981, 10651, 10739, 10957, 10583 and 10814).

Phase 13

Most of the finds recovered from this phase derived from surfaces within Rooms D and E of Building 13; apart from nails, structural ironwork found included two iron candle holders (SFs10635 and 10660) and several roves (SFs10499, 12039, 11048 and 11089). A late thirteenth- to early fourteenth-century silver coin (SF10658) and an iron buckle of similar date (SF11088) were also recovered from within Building 13. Further roves and clench-bolts were found in the Tenement X3/Y yard (SFs10643 and 10646), and an iron spur fragment on Tenement Z (SF10654).

PHASE 14: END OF THE FOURTEENTH- TO EARLY FIFTEENTH-CENTURY FLOODING OF THE SITE (NOT ILLUSTRATED)

The Stratigraphy

An extensive flood deposit sealed most of the site, including the remains of Building 14, implying that it had been demolished shortly before the flooding took place. The interior of Building 13 does not seem to have been affected by the flooding; a series of rubble deposits adjacent to the north-western wall of the southern wing of Building 13 may represent dumping to create a firm surface adjacent to the building in the wake of the flooding. This deposit sealed the earlier river channel, showing that it had migrated beyond the limits of the excavation by this stage.

The Pottery

This phase is dominated by flood deposits. There are significant changes in the pottery assemblage although again its character remains domestic. Cisterns and further open forms are added to the potter's repertoire.

Humber wares and coal measure wares increase in quantity through the period in question, as does a late white gritty ware. The Hallgate wares are likely to be residual by this time, as are some of the other smaller groups.

It is not clear what these levels represent in terms of activity and how they were formed. The diminution in the numbers of wasters/seconds seen after Phase 10

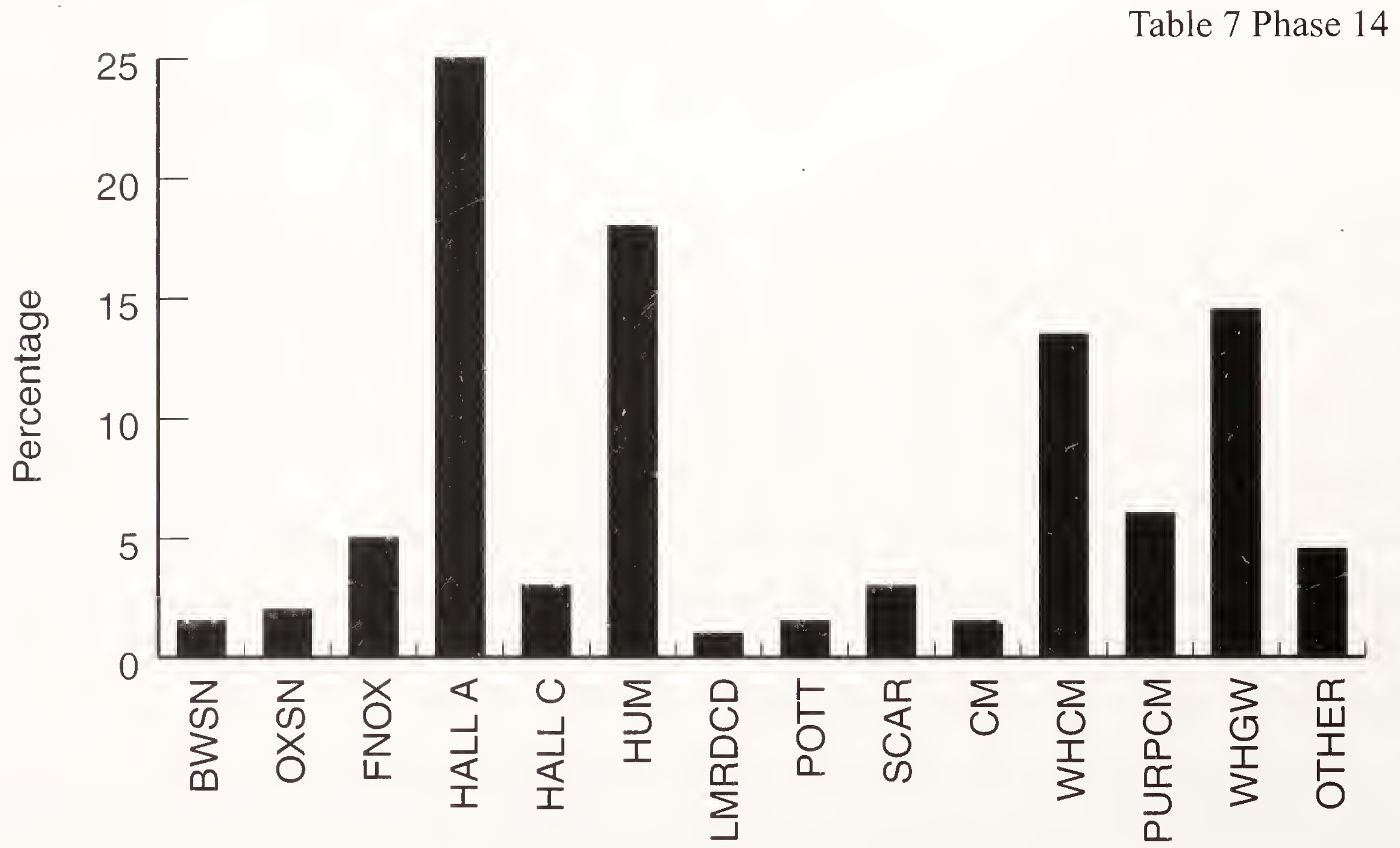


Table 7: Overall percentages by sherd count Phase 14

continues and very few such sherds were recovered (less than 1% of the assemblage). This suggests that the importation of material which brought them onto site has stopped at this point.

The Artefacts

Phase 14

The flood deposit contained mainly structural ironwork and personal items. Nails, roves and clench-bolts were recovered (SFs10491, 10627, 11114, 11167, 11382, 11655, 11678 and 11811). The personal items include an unusual copper-alloy mirror case (SF10621), a copper-alloy key (SF10613), two thirteenth- to fourteenth-century copper-alloy buckles (SFs10867 and 11318), another buckle of probable thirteenth- to fifteenth-century date (SF11429), a belt mount (SF11729), and a possible horseshoe fragment (SF11506). A silver coin of the third quarter of the thirteenth century (SF11317) was also retrieved.

PHASES 15–17: MID-FIFTEENTH–MID-SIXTEENTH CENTURY

The Stratigraphy

During these phases Tenements X1, X2, X3/Y and Z continued in use, though there was a slight shift north-eastwards in the boundary between Tenements X3/Y and Z (Fig. 10). New buildings were erected in Tenements X2 and X3/Y, while any buildings within Tenements X1 and Z were located beyond the limits of excavation. The dating evidence for these phases included abundant pottery, frequent leather shoe fragments and a Henry VIII penny of 1544–47.

Tenement X2

Building 17, which was 4m wide and in excess of 10m long, was constructed above the Phase 14 flood deposits. The sill-walls of the building had integral post-pads, two of which were located at the northern and western corners of the building, presumably to carry major uprights, while two more formed an opposing pair in the north-eastern and south-western walls c.0.8m from the north-western end of the building, possibly to support a major truss within the building. The remaining integral post-pads were located randomly within the walls. An internal wall, which lacked integral post-pads, divided the building into a northern room (Room A) measuring 4.0 x 4.2m, and a southern room (Room B) of unknown length. Internal earth floor surfaces were present in both rooms.

The building does not seem to have extended the full width of the tenement, but had an alley along its north-eastern side which was consolidated with layers of rubble. The extent of these deposits implies that there were doorways from the

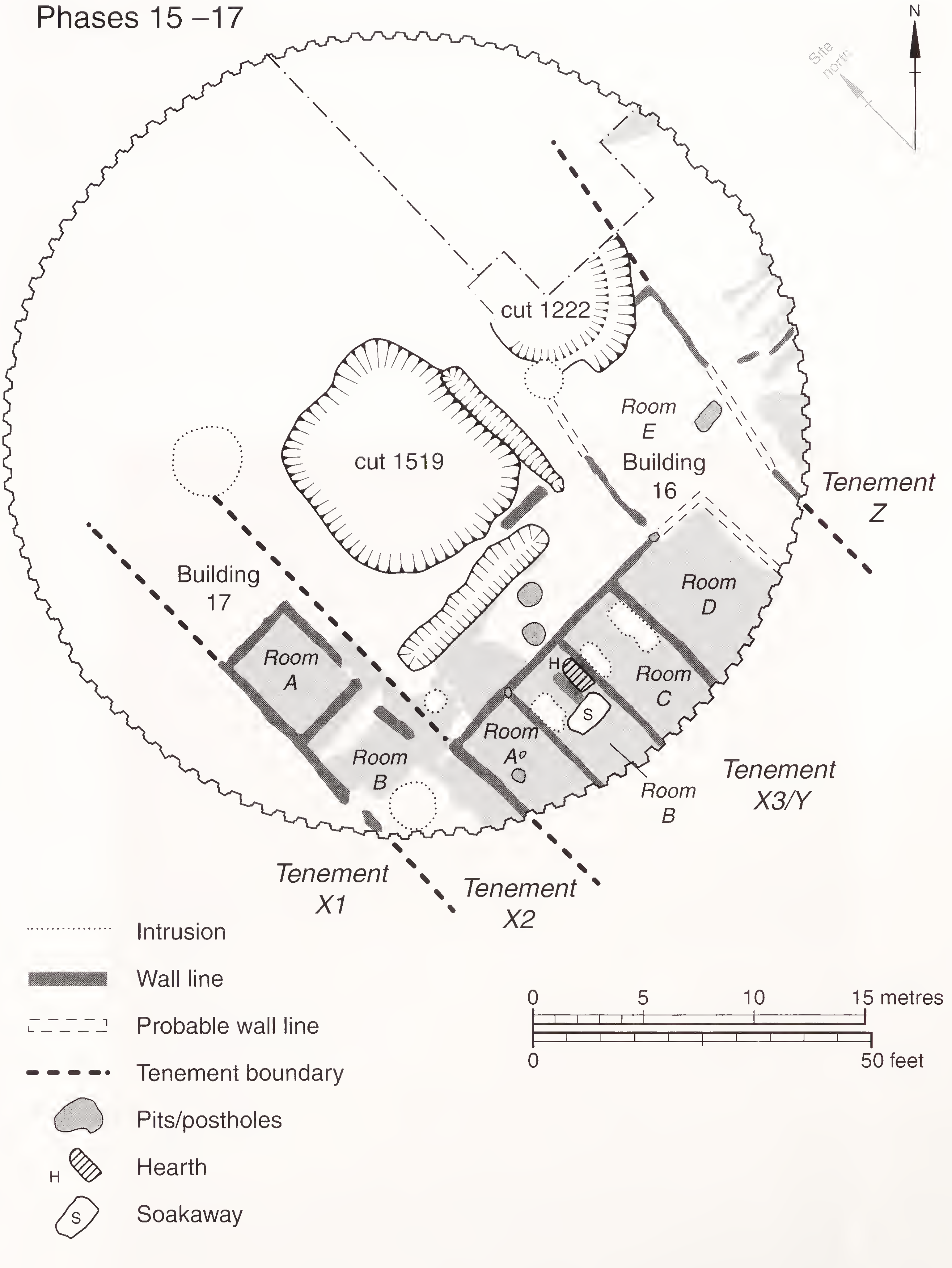


Fig. 10: Phases 15–17

alley into the north-western end of Room B and the south-eastern end of Room A; a stone threshold was later inserted into the Room B doorway.

A new wall was subsequently built 6m to the south-east of the original north-western wall of Building 17, but it is unclear whether this represents a new internal wall or a shortening of the building.

At some stage a pit cut was dug which effectively blocked the alley along the north-eastern side of the tenement; it was backfilled with domestic rubbish. It is unclear if Building 17 was still in use when the pit was dug, but Building 17 was later demolished and some of the integral pad-stones were robbed out. A series of rubble demolition deposits probably represent demolition dumps, and these were sealed by a build up of horticultural soil.

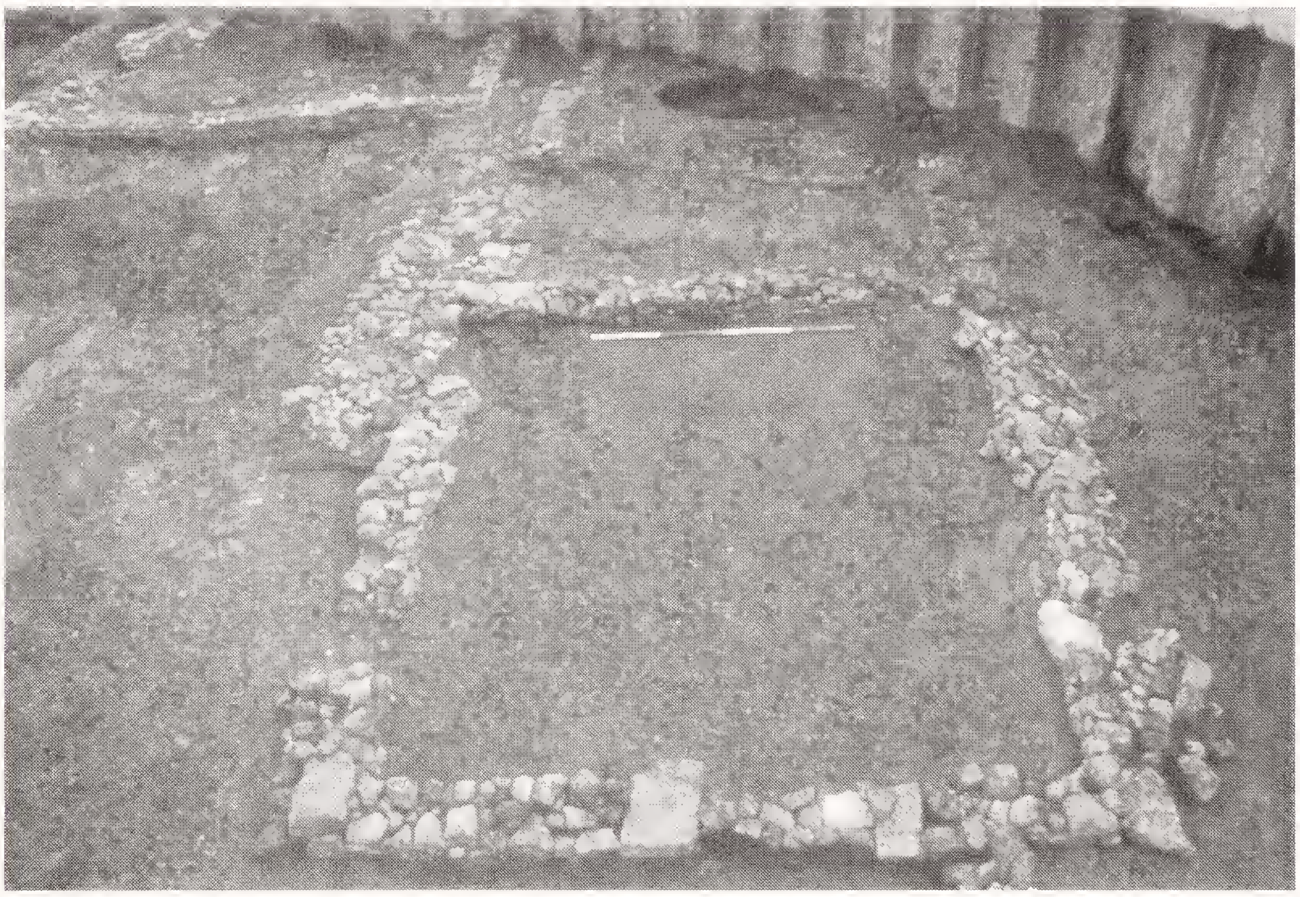


Plate 5: Building 17 facing south-east, Room A in the foreground, with the rubble-floored alley and the south-westernmost room of Building 16 to the left

Tenement X3/Y

Rooms F–G of Building 13 were demolished and a new drystone tenement boundary wall, which incorporated a reused voussoir of eleventh- to twelfth-century type (AF43), was built bordering Tenement Z; this was on a slightly different line to the earlier boundary. Silty-clay deposits accumulated above the area of the former Rooms F–G, and were then truncated by a rubbish pit. Two lengths of sill-wall may represent a final phase of alterations to Building 13, possibly a dividing wall between Rooms D and E.

Building 13 was then replaced by a new L-shaped building (Building 16), which extended the full width of the tenement and had a northern wing of 8.0 x 6.5m at the rear on the north-eastern side. There were four rooms in the southern range of the building (Rooms A–D) but the internal layout of the northern wing and north-eastern end of the building is unclear due to poor preservation. The sill-walls of the southern wing were in part bonded with clay and in part drystone walling. Integral post-pads and two post-sockets were present in the walls to carry upright timbers. The post-sockets were both in the external north-western wall of the building, one at the junction between the northern and southern wings of the building and one at the junction between the external wall and internal wall between Rooms A and B. Two post-pads were located in the north-western external wall of the building, one at the north-eastern end of the wall adjacent to the post-socket, implying two major uprights close together, and the second post-pad was located close to, but not at, the junction between the external north-western wall and the internal wall dividing Rooms B and C. Three aligned post-pads were present in the external south-western wall, and internal dividing walls between Rooms A/B and C/D. These were located c 1.7m south-east of the external north-western wall and were also aligned with an internal wall dividing Rooms D and E. The exact significance of this alignment of post-pads is unclear because the dividing wall between Rooms B and C lacks a similarly positioned post-pad. A further three randomly spaced post-pads were located within the dividing wall between Rooms C and D.

One wall contained a reused architectural fragment (AF32) with a pecked surface, which may suggest it was of late Roman origin; if so, the most likely source would have been the nearby Roman fort wall c.150m to the south-west of the site.

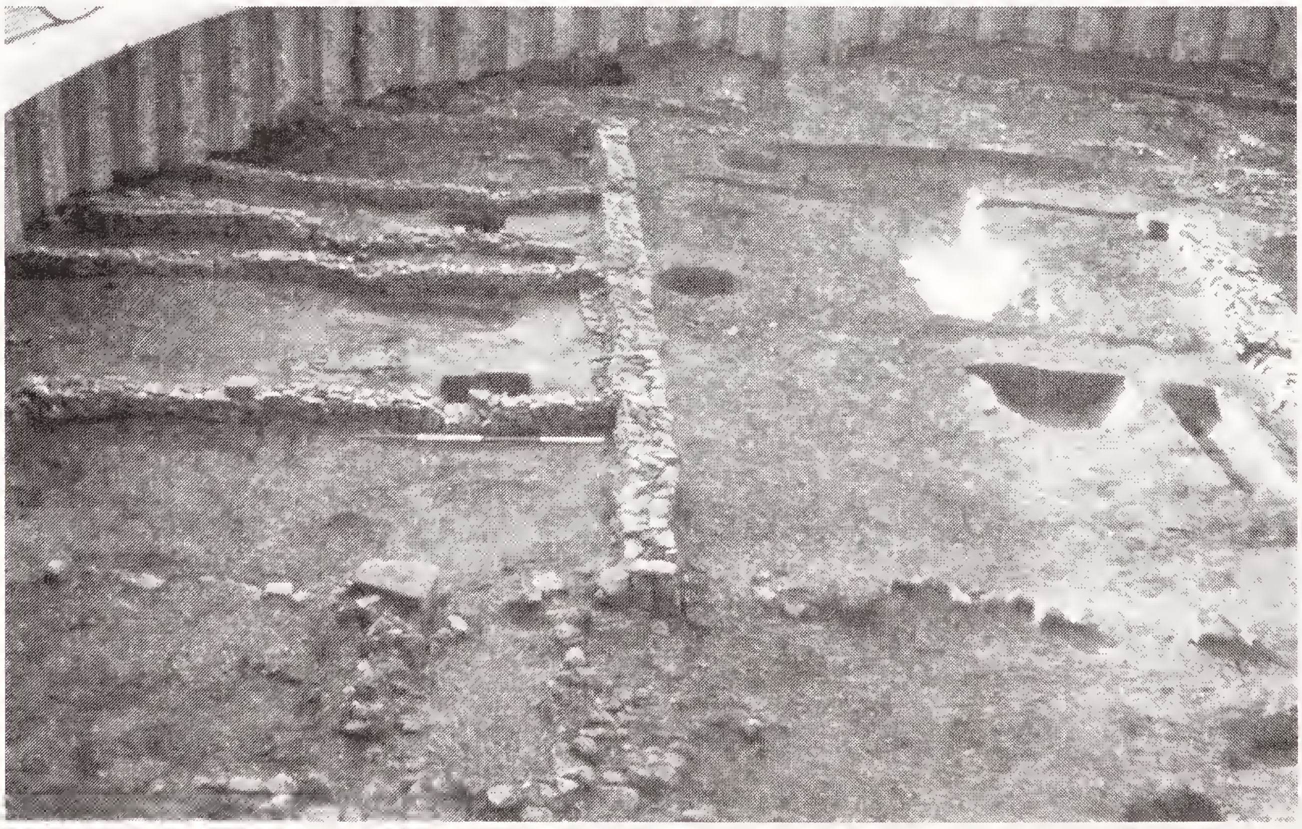


Plate 6: The southern range of Building 16 facing south-west, with the northern range of the building in the foreground

Reused burnt stones which occurred randomly within the walls probably originated from earlier buildings or hearths on the site. An awl for leather working was found within one of the walls, possibly suggesting leather working had been taking place on site prior to the construction of Building 16. The walls of the northern wing were far less substantial than those of the southern wing and lacked integral post-sockets or post-pads. This wing seems to have fallen out of use very quickly as there were no associated floor surfaces.

The initial use of the building comprised floor surfaces that were laid in Rooms A–D; these were similar in character to the flood deposits of Phase 14, implying that this material had been dug up and reworked for use as earth flooring. Virtually no food remains were found in any of the floors, which could imply that the rooms were not domestic in function, or that the floors were being kept meticulously clean. Two post-holes were present in Room A, while within Room B there was a clay hearth. A small portion of wall from the earlier Building 13, which was visible through the floor of Room B, formed a frontage to this hearth. The position of the hearth adjacent to the wall of the room implies that there must have been a chimney structure or fire hood above. Two superimposed stone-filled pits immediately adjacent to the hearth were interpreted as soakaways. A smaller stone-lined cut located near the western corner of the room may also have had a drainage function. The presence of the hearth and soakaways may imply an industrial function for this room. The location of the dividing wall between Rooms D and E at this stage is unclear, but the configuration of the floor deposits within Room D may imply that a timber sill-beam supported internal walls dividing the two rooms.

To the north of Building 16 in the tenement yard was a series of build-up deposits and a linear butt-ended cut 8.0 x 1.8 x 0.6m in size that ran parallel to, and 3m north-west of, the rear wall of Building 16. The function of this feature is uncertain; it makes no sense for drainage, and may have been a property boundary. If so, the tenement may not have extended to the river frontage at this stage. The cut was later infilled with material similar to that of the floor surfaces within Building 16.

Building 16 underwent frequent alterations. Within Room D (Fig. 11a) a gravel surface acted as the bedding for a hearth. A partition wall, comprising a line of clay pierced by stake-holes at one end and rubble set in clay at the other, was inserted, separating Rooms D and E. The configuration of the partition suggests a doorway led from the southern corner of Room E into Room D.

Further alterations (Fig. 11b) included the abandonment of Room E and, presumably, its demolition. An extensive deposit was laid down which sealed the southern portion of the wall dividing the Rooms C and D. The configuration of these deposits implied a sill-beam wall formed the north-western edge of Room D. New internal partitions were inserted, comprising rubble foundation and a beam

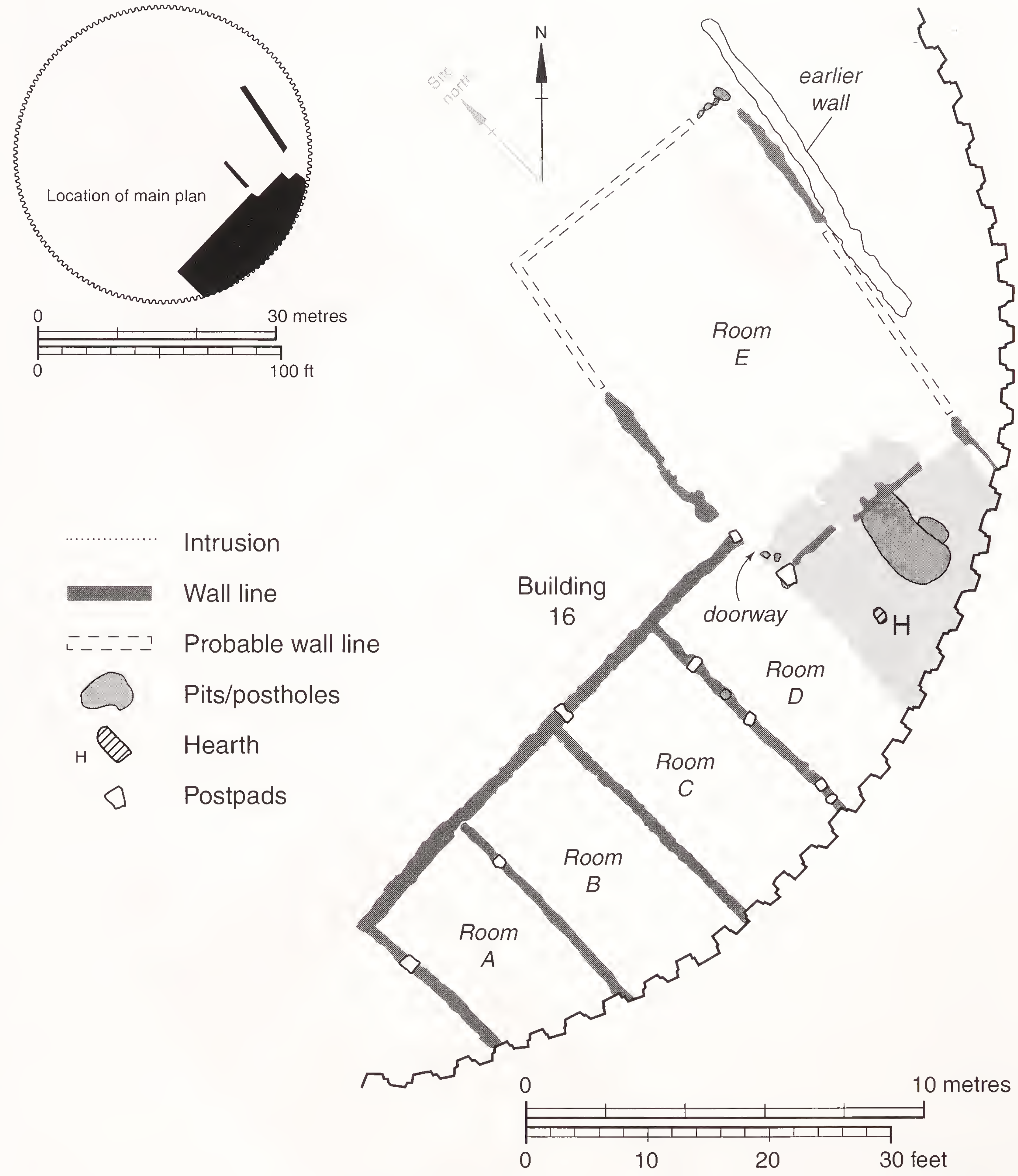


Fig. 11a: First phase of alterations to Building 16

slot, which enlarged Room C into an L-shape, and contracted Room D. A 1m-wide gap between the partitions was presumably a doorway giving access between these rooms.

A large pit (context 1222, Fig. 10) was dug above the area of the former Room E. It was infilled with copious quantities of leather offcuts from shoe manufacturing

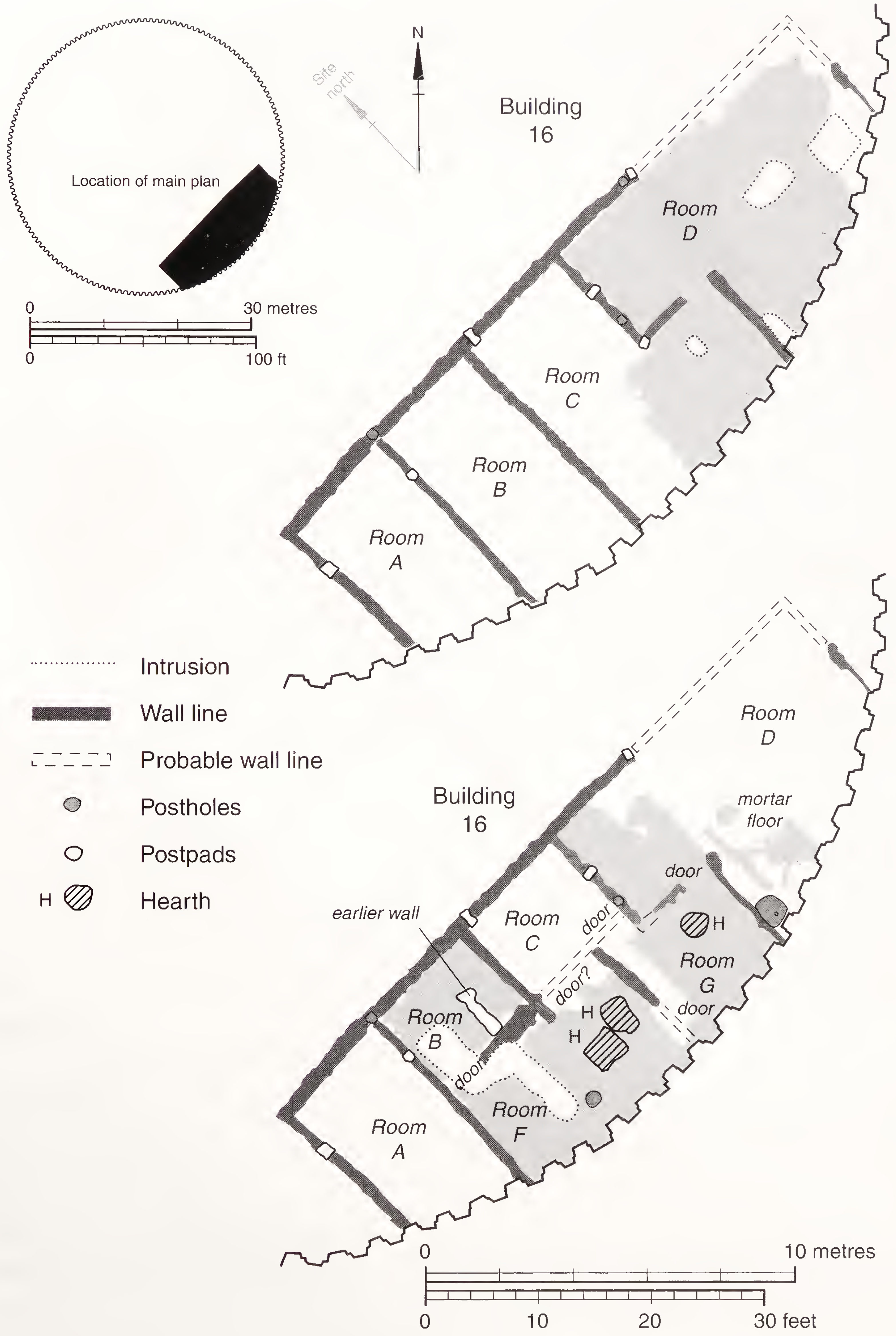


Fig. 11b–c: Second and third phases of alterations to Building 16

and repair. It is impossible to say if this leather originated from Building 16 or was brought from elsewhere for dumping, but it clearly implies shoe manufacturing/ repair nearby.

Yet further alterations to the interior of Building 16 (Fig. 11c) involved sealing the southern portions of the original walls dividing Rooms B/C and C/D. New partition walls on foundations of clay and rubble were inserted, creating two new rooms (F and G) along the street frontage. Gaps in these partitions suggest the positions of doorways between Rooms B/F, F/C, C/G and G/D. Internal earth surfaces were deposited in the building, and traces of a mortar floor were present in Room D. In Room B there were a number of stony deposits that may represent dumping to consolidate the ground surface. A stone threshold was inserted in the doorway between Rooms D/G and there was a clay hearth in Room G, which was later replaced by a post-hole, presumably for an internal fitting. Within Room F there were two adjacent hearths; a post-hole 0.46m in diameter was inserted into Room F.

Further alterations took place (Fig. 11d). In Room F an earth floor sealed the earlier hearths. A post-hole 0.22m in diameter and 0.17m deep and a succession of hearths, all located in slightly differing positions in the centre of the room, were inserted above the earth floor. Analysis of a soil sample from one of these hearths yielded traces of poorly preserved fish and mammal bones. Within Room G a hearth was constructed close to the north-western wall of the room and a new earth floor trampled in, a process which sealed the door threshold between Rooms D and G. The threshold was reinstated and a post-hole 0.1m in diameter was inserted to carry the eastern side of a door.

The original wall between Rooms A and B was replaced by a new limestone wall, with a doorway at its north-western end giving access to Room C and a second doorway at the south-eastern end giving access to Room F. New earth floors accumulated within Rooms A, B and F. Within Room D there was a new earth floor surface, and a group of limestone fragments set in silty-clay may represent a post-pad to support the northern corner of Building 16.

Slightly to the north of Building 16 were a number of features that could not be closely phased (Fig. 10). These included three rubbish pits and a linear cut, aligned north-west to south-east, with a base sloping towards the river; this presumably represents a drainage gully. A second linear cut, with an integral post-hole was located parallel to and c.5m north-west of the rear wall of Building 16; this may have been a gully for a fence and could represent a new rear boundary for Tenement X3/Y.

A circular cut, context 1519, 8.5m in diameter, was dug to the north of the possible fence. It is interpreted on the basis of the environmental evidence as a pond used for the watering of livestock (Hall, Kenward and McComish 2003). It is

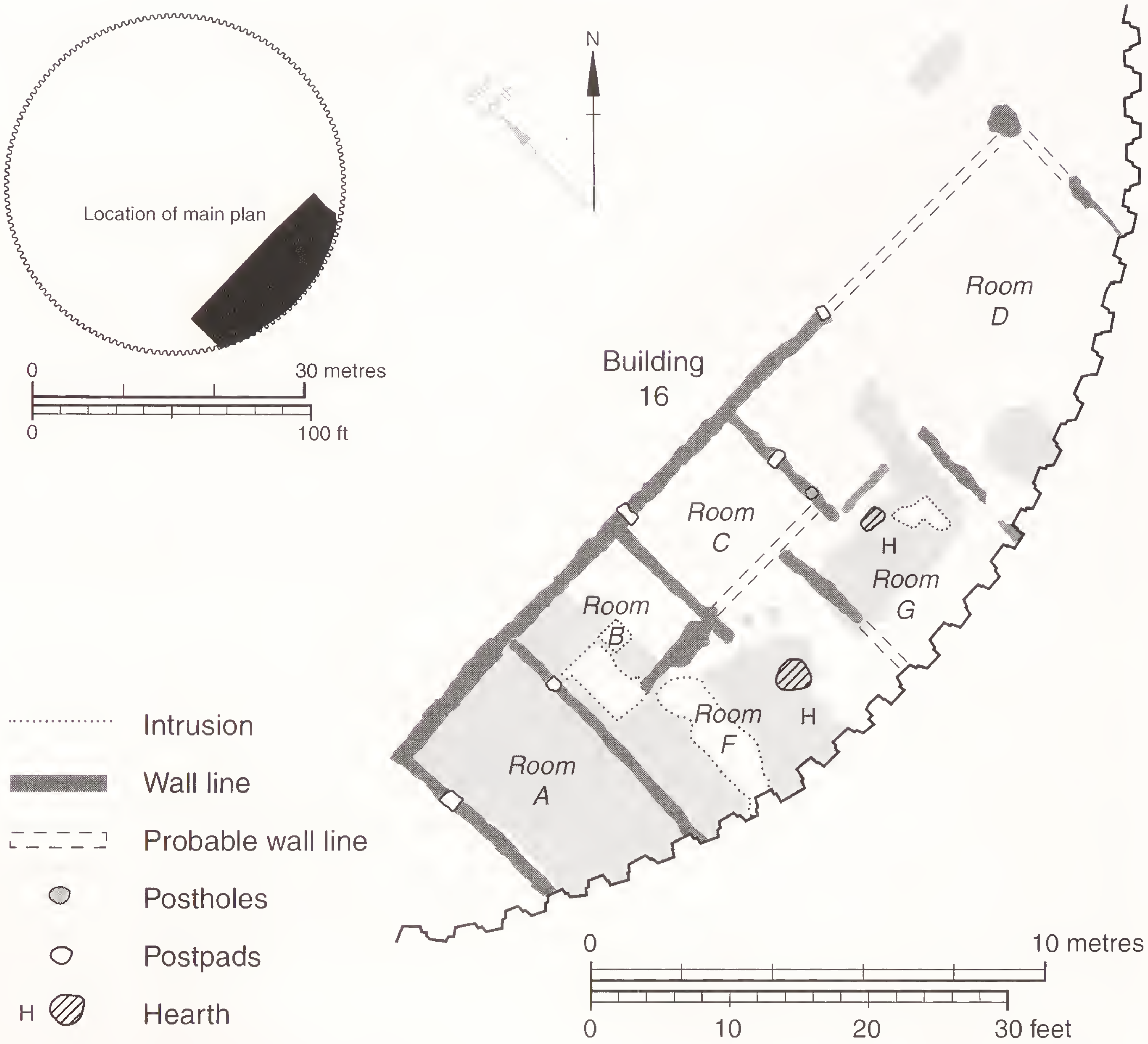


Fig. 11d: Fourth phase of alterations to Building 16

unclear how this related to the occupation of Building 16; it may even have been located in a separate plot of land to the north-west of Tenement X3/Y, which was in use as a stockyard. The pit was subsequently infilled with dumps of rubbish of fifteenth- to sixteenth-century date. Among the many finds within this rubbish were butchering waste, domestic rubbish and a dumped architectural fragment (AF65) with claw-tooling of late twelfth-century or later date. A second large cut was present close to the north-western limits of excavation; its function is unclear, but it may have been a rubbish pit.

Tenement Z

Within Tenement Z there were a series of east–west cuts 0.1m deep with vertical sides and flat bases which were presumably for garden drainage. In addition there were short two lengths of roughly east–west alignments of limestone fragments bedded in sand, which may have been foundations for sill-beams. As no other walls seem to relate to them their exact function is unclear, but they may have been for garden features. A series of deposits of varied composition in the southern portion of the tenement included two of gravel and limestone fragments, which probably represent deliberate dumping to consolidate the ground surface. In the northern part of Tenement Z river-lain deposits accumulated, subsequently truncated by a rubbish pit.

The Pottery

The trend seen in the previous phase continues, with Humber wares and the coal measure products and related wares dominating the market. More cisterns, drinking jugs, mugs and open forms are seen amongst the assemblage.

The various Hallgate, shell-tempered and other types of gritty wares are residual by this time. Imports include a few sherds of Low Countries red wares as well as German stonewares.

Table 8 Phases 15-17

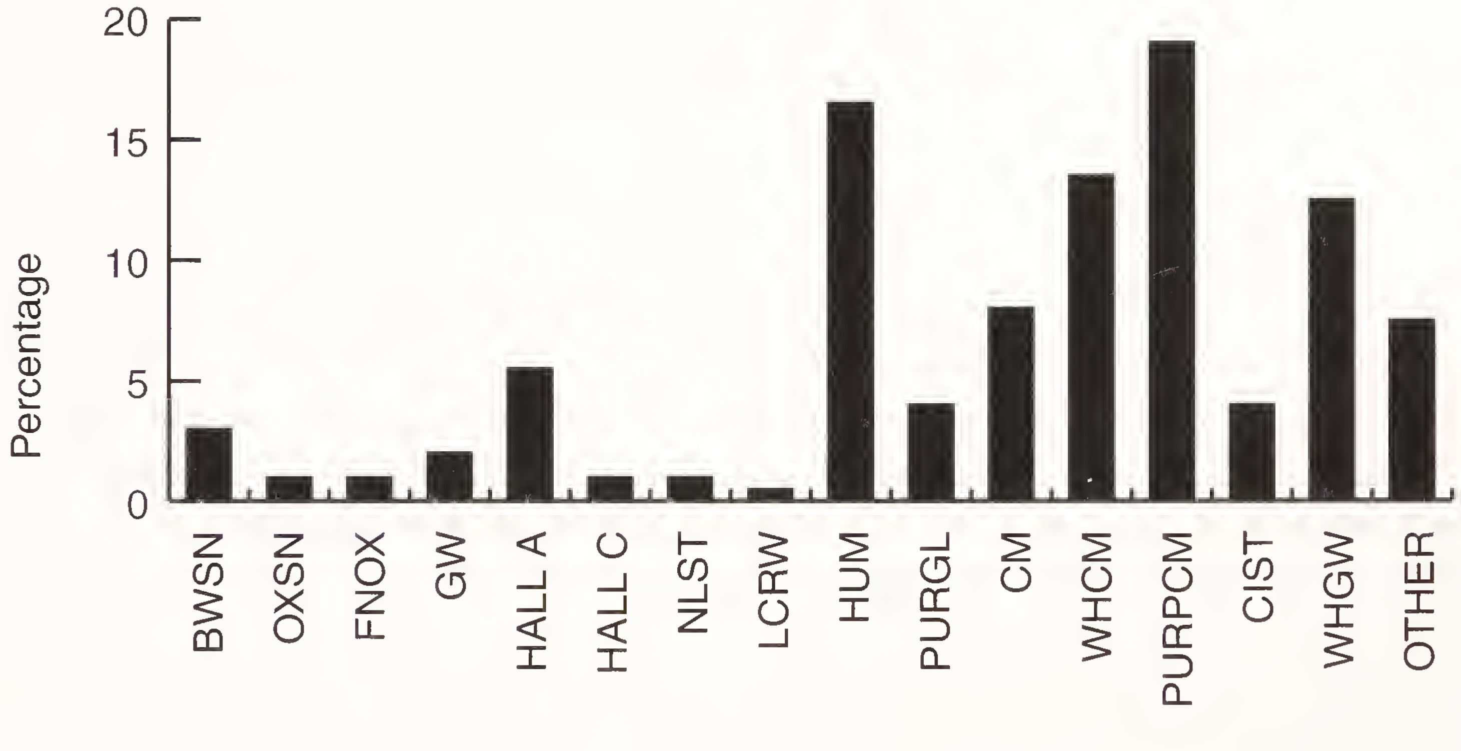


Table 8: Overall percentages by sherd count Phases 15–17

The presence of Cistercian wares, especially in Phase 17, indicates that this episode continues into the sixteenth century. Earlier occurrences in Phases 15 (two sherds) and 16 (eighteen sherds) are usually from the upper fills of features in these phases; the majority is from Phase 17 features.

The Artefacts

Phase 15

Most of the artefacts from this phase were found in association with Buildings

16 (Tenement X3/Y) and 17 (Tenement X2). Stone quern and mortar fragments were found reused in various features of Building 16, including one of the soakaways of Room B (SF10237), dumps to create floor surfaces (SFs11771, 11768 and 10866) and in a wall (SFs10856, 10865 and 11767). Other objects from Building 16 included tools such as an iron awl for leather working (SF10471), a stone hone (SF10192) and a knife blade (SF10343), while personal items were noticeably lacking. A possible lead-alloy spindle whorl (SF10358) came form the ditch parallel to the rear wall of Building 16. Copper-alloy fittings from belts of thirteenth- to fifteenth-century date (SFs10459–60) came from Tenement X3/Y/Z features, and from Building 17 (SF10291).

Phase 16

The majority of the artefacts from this phase were recovered from the backfills of pit 1222. Large quantities of leather shoes and leather-working debris were found. The leather-working debris was found almost exclusively in context 2642, which produced over 900 offcuts deriving from shoe manufacture (cordwaining) and repair, as well as fragments of twenty-one turnshoes. One offcut and six shoes were also recovered from context 1410. The shoes of identifiable form date predominantly from the late fourteenth–early fifteenth centuries. Tools used in a range of crafts were also recovered, including an iron spoon bit used in wood working (SF11503), a tanged iron punch (SF11416) for metal or wood working, knives (SFs10940, 10680 and 11600) and hones (SFs11296 and 11438), and a possible iron scalpel (SF11256). Apart from nails, the structural ironwork included an iron hinge pivot (SF11528); iron keys for mounted locks were also found (SFs11091 and 11513). Amongst personal dress accessories were two-piece strap-ends (SFs10531 and 10636), and copper-alloy pins (SFs11535 and 11580), while a decorative stapled hasp (SF11406) may have been fixed onto a casket or small chest. A possible mortar fragment (SF11759) and two lead-alloy spoons (SF10399 and 10572) were also recovered. This material probably dates from the thirteenth–fifteenth centuries.

A small amount of material was retrieved from Rooms C and D of Building 16: this included an early fourteenth-century silver coin (SF10313), a knife with remains of a wooden handle (SF10403), a hone (SF10228), a belt mount (SF10298) and two stone discs, possibly pot lids, which appear burnt (SFs10401–02).

Phase 17

This phase produced the most material of all phases, the vast majority being recovered from fills of pit 1519. Virtually all of the 1.5kg of smithing slag found within Phase 17 deposits came from these fills, although it is thought that this slag is insufficient in quantity to represent smithing on site at this period. Six leather shoe fragments include three welted shoe fragments (SFs10875, 10653 and 10688) which must date from the fifteenth century or later, while a turnshoe fragment (SF10687) is probably residual. A small number of other leather fragments and scraps were also found, but these are insufficient to indicate leather working at this time, and are more likely to be residual from Phase 16. Other residual material includes several quern fragments (SFs10855, 10859 and 11762).

Apart from the artefacts noted above, most of the material from the fills in this feature is of a domestic or personal nature: fragments of vessel glass include SF10481, which is probably the base of a late sixteenth- to early seventeenth-century ale glass, a sixteenth- to eighteenth-century tumbler fragment (SF10914), and a sixteenth- to eighteenth-century wine bottle fragment (SF10916). A figurative lead-alloy mount which appears to depict a bishop (SF10928) was also recovered. Scale tang knives (SFs10552 and 10614), a knife blade fragment (SF10721), a hone (SF10589) and an iron padlock (SF10853) were also recovered from this pit. Personal items from the same feature include a copper-alloy bell in two fragments (SFs10600 and 10868), a double-sided one-piece boxwood comb (SF10638) of thirteenth- to sixteenth-century date, buckles (SFs10725 and 10861) and a fired clay spindle whorl (SF10582). A late eighteenth-century glass bottle fragment (SF10502) is intrusive.

Other artefacts were found in surfaces associated with Building 16; these included a residual early fourteenth-century silver coin (SF10204), a copper-alloy belt mount (SF10197), a belt strap clasp (SF10264) and a spindle whorl (SF10263).

PHASES 18–19: SIXTEENTH–EIGHTEENTH CENTURY

The Stratigraphy

The dominant feature of Phase 18 was an extensive deposit interpreted on the basis of the environmental evidence as a garden soil. This covered most of the site, implying a widespread change of use for the area. There were still hints that Tenements X1, X2 and X3/Y at least had survived in some form, but the use of Tenement Z is unclear (Fig. 12). Relatively few features of sixteenth- to eighteenth-century date (Phase 19) were present above this deposit, and these were scattered across the excavation area. Few clear traces of buildings were present, either because these were located outside the area of excavation or because they were machine cleared at the start of the excavations. Tenements X1 and X2 may have merged as some features extended across the two tenements.

Tenement X1

A pit was backfilled with cow horns, cow bones and some horse bones, the remains of butchery, tanning and horn working waste. The pit was associated with seventeenth- to eighteenth-century pottery.

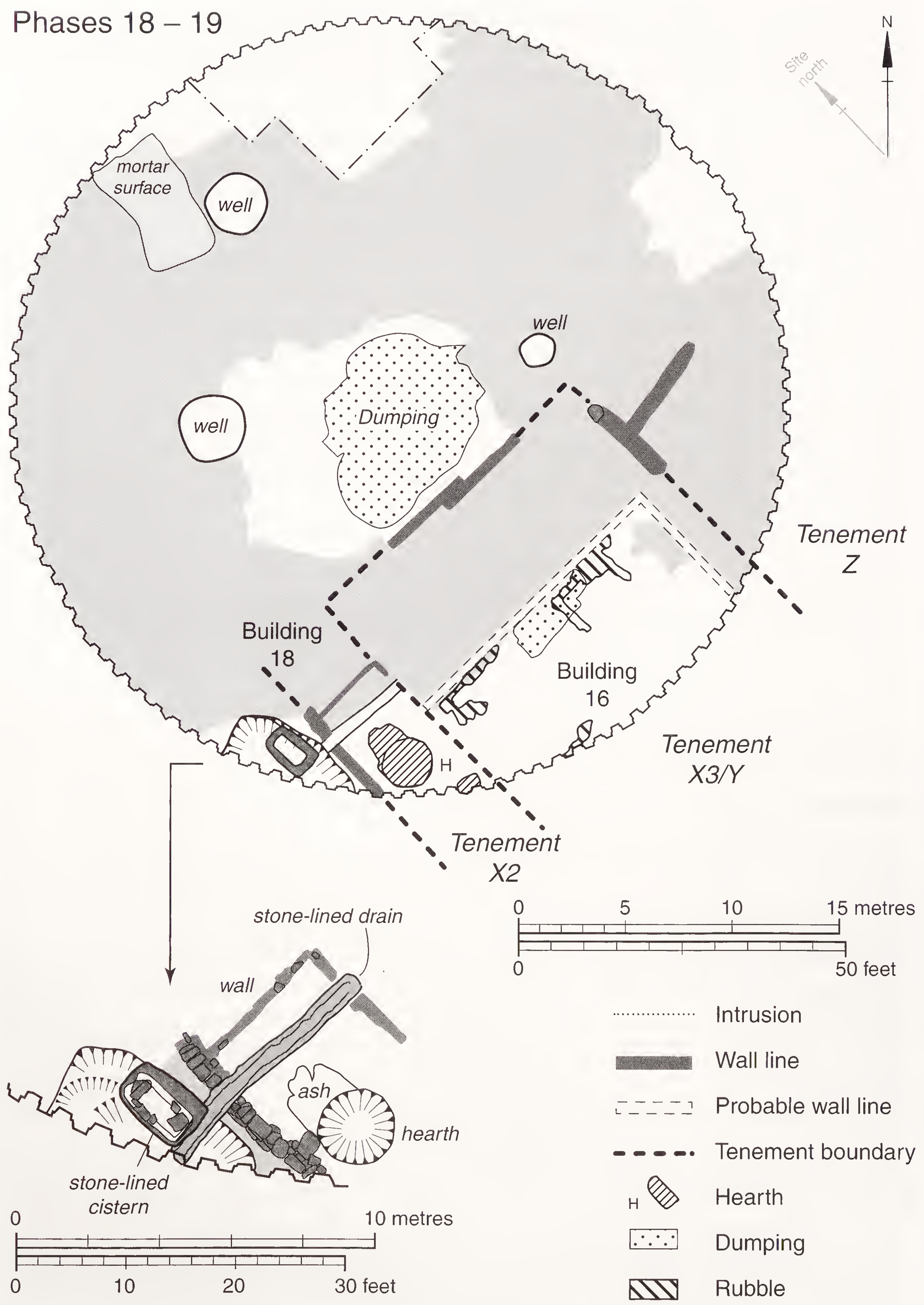


Fig. 12: Phases 18–19

Tenement X2

There were two lengths of sill-walls which were interpreted as the incomplete remains of Building 18. No internal surfaces survived so the use of the buildings is unclear. Building 18 directly overlay Building 17 and was clearly its replacement.

Within Building 18 there was an industrial hearth represented by a circular cut 2.12m in diameter and 0.41m deep, with vertical sides and flat base, with a stone lining around the exterior edge bonded with clay. Deposits of ash, charcoal, some lime and burnt clay/straw represent the use of the furnace. The feature was remodelled within a new 1.85 x 1.20m cut, lined with clay, above which further ashy deposits accumulated. This was interpreted at the time of excavation as a hearth for copper smelting on the basis of a fragment of copper slag adhering to one of the stones in the lining, and the fact that there were two gaps in the stone lining, interpreted at the time as possible entry points for tuyeres. This may not be the case; analysis of the finds from this group contained only two fragments of slag and five copper-alloy objects, which is hardly suggestive of copper-smelting. Some lime was present in one of the use-deposits, which may suggest it was a limekiln, and since lime was used in the preparation of hides this feature may have been associated with leather production. It is also possible that the hearth could have been used for heating a large vat, such as used for dye preparation, which again may relate to leather production on the site.

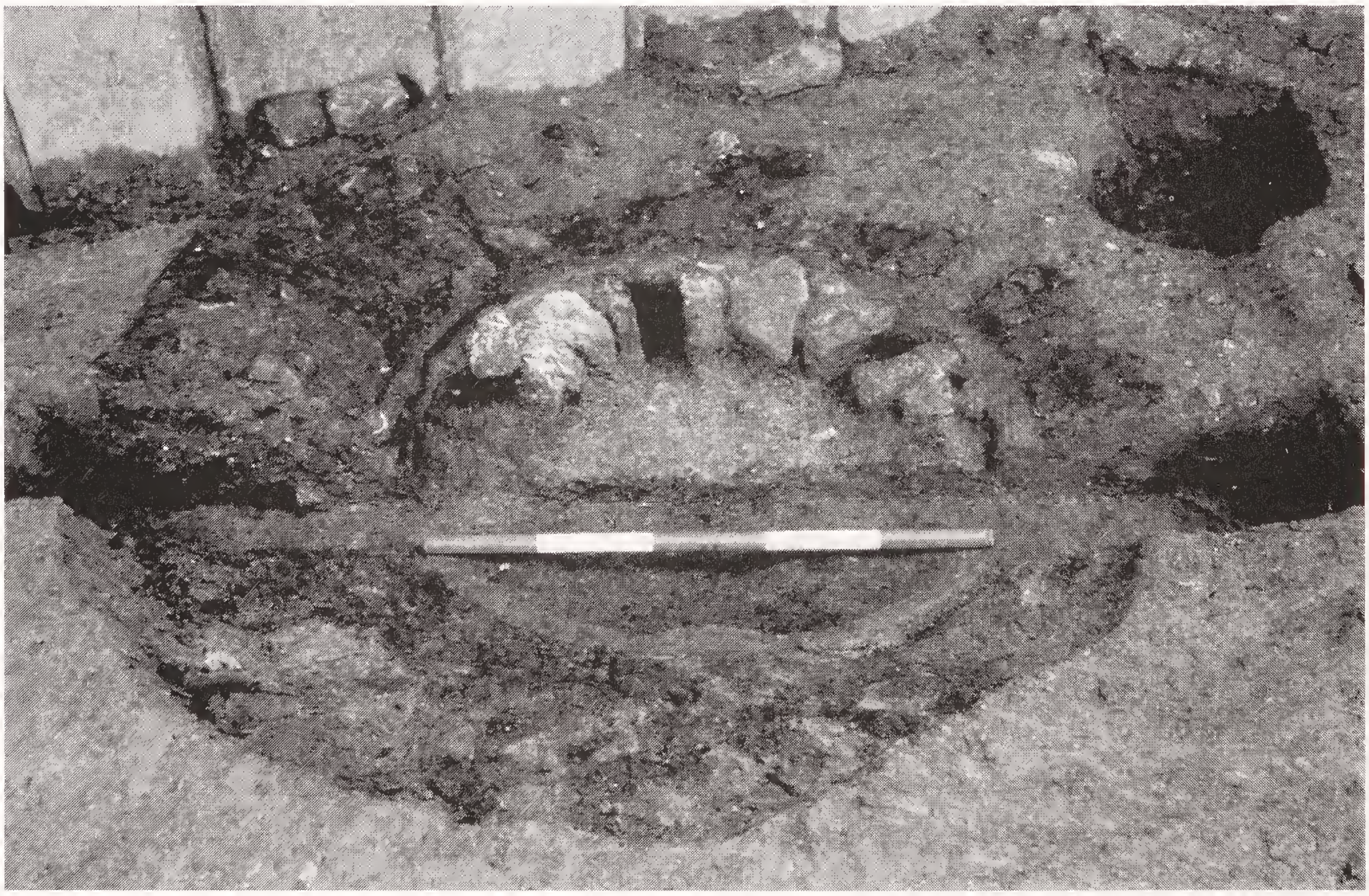


Plate 7: The industrial hearth in Tenement X2

A smaller hearth was also found, though as this lay largely outside the excavated area its original form and function (domestic or industrial) is unclear. As no floor surfaces were present within Building 18 it is impossible to know if these hearths were internal to the building or post-dated it.

Tenement X1/X2

A stone-lined water cistern, 2.5 x 1.5m, was located directly above the large pit filled with cow bones in Tenement X1. The cistern was constructed from roughly hewn coursed limestone blocks and lined with a clay deposit that was clearly designed to act as waterproofing material. The cistern was roofed with limestone slabs beneath a timber lid. Analysis of these timbers showed that they were sawn planking which originated from a boat of smooth-skinned or 'carvel' construction, lined with a felted layer of animal hair (probably cattle hair) and waterproofed with plant fibre (probably hemp) and wood tar. The use of plant fibres dates these finds to the sixteenth century or later, which fits the stratigraphic evidence as the cistern post-dated features of seventeenth- to eighteenth-century date. Associated with the cistern was a stone-lined drain. These features cut though Building 18, implying that it had gone out of use, and straddled the earlier Tenements X1 and X2, implying that they had been merged into one larger plot at this stage.

Plate 8: The stone-lined cistern in Tenement X1

There is no stratigraphic reason why these features could not be contemporaneous with the industrial hearth described in Tenement X2 above. The close proximity of the hearth, cistern and drain may suggest that they are related. If the hearth is interpreted as being connected in some way to the production of leather it may be that the cistern and drain were associated with the water supply for washing hides after dyeing or processing with lime. A similar group of seventeenth-century features from Sprotborough, 2km west of Doncaster (cistern, drain and hearths), was interpreted as probably relating to the preparation of hides (Fenton-Thomas *et al* 2007, 266).

Tenement X3/Y

Two lengths of walling ran parallel to and c.6m north-west of the rear wall of Building 16. They may represent a boundary wall for Tenement X3/Y, replacing the earlier Phase 17 boundary fence. A garden soil deposit accumulated around this wall and butted up against the rear wall of Building 16, implying that it was still in use. The configuration of the garden soil implied that Room D terminated at a sill-beam 6.5m to the south-west of the original north-eastern wall of the building. A linear cut with an integral post-hole at the north-western end may represent a new boundary fence line for Tenement X3/Y; if so the tenement had contracted on the north-eastern side by c.3m.

Deposits of rubble adjacent to the north-west wall of Building 16 may represent attempts to consolidate the ground around the building, or could represent the demolition of the building, which had certainly gone out of use prior to Phase 19.

Tenement Z and the northern portion of the site

The remainder of the features were scattered across the site, and as no clear boundary features were present it is impossible to know how the land was subdivided at this stage. Highly organic deposits were dumped in a hollow in the central portion of the site; soil samples from these contexts contained food waste, some house fauna, some outdoor-fauna beetles, butchery waste and weeds from disturbed soils. There were several pits interpreted as rubbish pits and a shallow linear cut of uncertain function which was recut on one occasion.

A shallow rectangular cut measuring 6 x 3m contained a flagged limestone surface bedded on mortar and clay. The surface was repaired at least once by patches of mortar. Large numbers of sheep metapodials found above this surface may represent the dumping of tanners' waste. The surface may also have been deliberately constructed for the processing of sheepskins.

Three wells were present, one of which was backfilled with alternating bands of very organic material and of clay. Analysis of environmental samples from the organic deposits showed that they consisted of stable manure, and the bands of clay were probably a deliberate attempt to seal the organic matter, perhaps to stop it from smelling.

The Pottery

Little in the way of structures and use deposits could be associated with these late phasez when the site seems to have been largely laid down to garden soil and there is evidence of further episodes of flooding. There are demolition levels associated with the late medieval buildings but the pottery is very mixed, especially in Phase 19. This being the case, it is difficult to interpret the pottery in terms of activity on site but it is clear that the chronological range of the assemblage extends well into the eighteenth century.

The main types recovered from these phases are the white gritty wares and Humber wares which include other later purple-glazed wares and other oxidised sandy wares. Coal measure wares, including both purple and white wares, continue to be present. Given the nature and formation of the deposits, much of the pottery must be redeposited from earlier levels. Cistercian wares, later brown and black-glazed wares, a few slipwares, yellow wares and small amounts of tin-glazed earthenwares are amongst the post-medieval types represented.

The Artefacts

Phase 18

The majority of artefacts from this phase came from the build-up deposit, and consisted of several residual objects including a fourteenth- to fifteenth-century copper-alloy buckle (SF10229), a Roman coin (SF10467), a quern fragment (SF10411) and an antler offcut (SF10274). Other finds recovered include a lead-alloy inscribed token or brooch (SF10273), together with a lead-alloy weight or spindle whorl (SF10173), copper-alloy stud (SF10178) and plated iron key fragment (SF10179).

Phase 19

Most of the material recovered from this phase was from build-up/dumped deposits. A total of seventeen leather shoes of the later sixteenth century onwards were found, the majority of them (fourteen) being recovered from the highly organic dumps in the central portion of the site; this deposit also produced a late sixteenth- to early seventeenth-century jeton (SF10207). Vessel glass fragments, in particular of late sixteenth- to eighteenth-century drinking vessels and bottles, came from deposits across the site (SFs10008, 10012, 10022–23 and 10190). Two iron arrowheads were found, both possibly used in hunting, SF10750 which is probably residual and SF11596 which is sixteenth- to seventeenth-century in date. Also likely to be residual is mortar fragment (SF10380), antler offcut (SF11598), quern fragment (SF10377) and linen smoother fragment (SF10149).

A feature interpreted as an industrial hearth or furnace within Building 18 produced a small amount of metal-working debris, both of copper alloy (SFs10249, 10246 and 10333) and of iron (SFs10212 and 10307), but overall amounts of metal-working debris from this phase is small and does not suggest metal working on site.

PHASE 20: NINETEENTH–TWENTIETH CENTURY

Most of the deposits of this date were machine cleared at the start of the excavations. The only hand-excavated feature was a well 1.7m in diameter, the backfill of which contained modern pottery.

The Pottery

Pottery from the initial machine clearance of the site is not included.

The Artefacts

Only ten small finds were recovered from this phase. They include residual material such as a leather shoe (SF10024), eighteenth-century wine bottle fragments (SFs10043–44 and 10073) and a possibly nineteenth-century lead-alloy button (SF10005).

SUMMARY OF THE BUILDINGS

A total of eighteen buildings and two structures were present, all of timber. Most were rectangular with the long axis at right angles to the street frontage, the only exceptions being Building 8 which had its long axis parallel to the street frontage and Buildings 9, 13 and 16, which were L-shaped with the longer axis parallel to the street frontage. (Building 1 and Structures 1–2 were insufficiently preserved to determine the orientation of the roof ridge).

Structures 1–2 and Buildings 1–2, 4 and 17 did not extend over the full width of the tenements in which they were located. In the case of Buildings 2 and 4 this may have been to provide clear access routes to a number of riverside structures. Building 17 had an alleyway running along the eastern side of the tenement, presumably giving access between the street frontage and the tenement yard. The other buildings all extended the full width of the tenements (Buildings 3, 5 and 15 extended beyond the limits of excavation so their full widths, and their relationship to the size of the tenement in which they were located, is unknown).

Wall construction

The external walls of the pre-fourteenth-century buildings on site were constructed with a variety of techniques (see Table 9). These included earth-fast posts, beam-slots for sill-beams, beam-slots with integral stake- or post-holes to fix the sill-beam into position, sill-beams laid directly on the ground, sill-beams above clay banks and sill-beams above lines of stones. Five of the buildings/structures of this date were constructed using a single walling type, but four of the buildings (Buildings 2, 4, 5 and 7) each contained more than one type of walling; it is unclear why these buildings were constructed using different techniques for different walls.

From the first half of the fourteenth century there was a marked change in the construction methods, with a shift to the placing of the timbers above stone sill-walls (see Table 9). Regionally, the date at which this change occurs seems variable. At Bawtry the change occurred in the middle of the thirteenth century (Dunkley and Cumberpatch 1996, 248) and at Eastgate, Beverley, sill-walls appeared in the fourteenth century (Evans and Tomlinson 1992, 290). The change to the use of sill-walls produced more durable buildings, as the basal woodwork was no longer in direct contact with the ground and was therefore less prone to rotting. Most of the sill-walls on the site did not contain any integral post-holes, implying that the buildings above were fully framed and dependent entirely on the timber jointing for stability. The sill-walls of Buildings 13 and 16, however, both contained integral post-holes, which may have been intended to increase the stability of the timber-framed buildings above.

The stone sill-walls found on site were largely of drystone construction, though some had clay, silt or sand bonding; none was bonded with mortar.

Although the external walls on the site show a clear chronological change in the early fourteenth century, the methods used for constructing the internal walls or partitions continued to be variable. The use of sill-walls for internal walling began slightly later (in the central decades/late fourteenth century) than for the external walls, but even then it was not the exclusive method of construction (see Table 10). Presumably the internal walls, being better protected from the elements, were less prone to decay, and sill-walls may not therefore have been thought necessary. Also, in many cases, the internal walls/partitions may have required less structural strength and therefore less substantial foundations.

Any available stone was recycled for building purposes. Reused burnt limestone was found within the walls of Buildings 9, 10, 12–13 and 15–17. There is evidence for in situ burning in Buildings 8–9, and these buildings may have been the source for the burnt stones in the later buildings; however, the burnt stones could also have come from the many hearths found on the site. Reused architectural fragments, which must have originated from higher-status buildings elsewhere in Doncaster, were present in the walls of Buildings 10, 13 and 16. One probable source for these stones was the nearby Norman castle, which had been demolished by the time the earliest of these buildings was constructed. Broken querns were reused within the walls of Building 13, and chalk and flint were reused in the walls of Buildings 8 and 12. A Roman stone coffin, originally for a child, was also reused as a hearth-back, while a gravestone 470 x 300 x 10mm in size, with an incised

Building or structure number	Date	Earth-fast posts	Beam-slots	Post-pads	Sill-beams	Sill-beams on clay banks	Sill-beams above stones	Sill-walls	Sill-walls with integral post-holes or pads
B1	Second half twelfth century		Yes						
S1	End of twelfth century to mid-thirteenth century	Yes							
S2		Yes							
B2		Yes			Yes	Yes			
B3		Yes							
B4	Late thirteenth –early fourteenth century				Yes	Yes	Yes		
B5					Yes	Yes			
B6				Yes					
B7			Yes		Yes				
B8	First half of fourteenth century				?			Yes	
B9					?			Yes	
B10							?	Yes	
B11								Yes	
B12								Yes	
B13	Mid/late fourteenth-century								Yes
B14								Yes	
B15								Yes	
B16	Mid-fifteenth–mid-sixteenth century				?				Yes
B17									Yes
B18	Sixteenth–eighteenth century								Yes

Table 9: Summary of external building wall types present on the site

Building	Date	Earth-fast posts	Beam-slots	Post-pads	Sill-beams	Sill-beams on clay banks	Sill-beams above stones	Sill-walls	Sill-walls with integral post-holes/pads
1	Second half twelfth century	?							
4	Late thirteenth–early fourteenth century	?	Yes		Yes	Yes			
9	First half of fourteenth century	Yes							
13	Mid/late fourteenth-century		Yes	Yes	Yes				Yes
14		?	Yes		Yes	Yes			
16	Mid-fifteenth–mid-sixteenth century	Yes		Yes	Yes		Yes	Yes	Yes
17								Yes	

Table 10: Summary of internal building-wall types present on the site (? = possibly present)

cross, had been broken up and reused in walling.

The presence of the coffin is of interest; no other Roman stone coffins are known from excavations in Doncaster. The main Roman cemeteries seem to have been located adjacent to the Roman road on the southern side of the vicus, which was in turn to the south of the Roman fort (now known as Hallgate/High Street and Wood Street). The discovery of the reused coffin at Low Fisher Gate, must either therefore indicate that a coffin was removed some distance from this cemetery for reuse, or that another cemetery was located to the east of the Roman fort adjacent to the road leading towards Kirk Sandal (P. Robinson, pers. comm.).

Random sampling of stone from some of the walls of the buildings showed that the dominant stone type used was Lower Magnesian Limestone, extensively quarried in the Don Gorge 5km upstream of the town. There were smaller numbers of fragments of other stone types (see Table 11) including sandstone, flint, chalk, limestone erratics and millstone grit. The sandstone was probably derived from a local source 0.3km east and south-east of the site; both the flint and chalk originated from either the Yorkshire or Lincolnshire Wolds and probably came to the site as ballast in boats, while the millstone grit was from reused quern fragments.

Building number	Date	No. of stones sampled	No. of small finds	Lime-stone	Burnt limestone	Flint	Sand-stone	Chalk	Mill-stone grit	Lime-stone erratic
4	Late 13th–early 14th century	5		4	0	1	0	0	0	0
7	Late 13th–early 14th century	3		2	0	1	0	0	0	0
8	First half of 14th century	39	1	17	7	3	8	0	5	0
9		0	2	0	0	0	0	0	2	0
12		22		14	1	4	1	1	0	1
13	Mid/late 14th century	18	1	12	0	2	2	1	1	1
15		47		34	6	0	7	0	0	0
16	Mid-15th–mid-16th century	22	7	12	7	0	2	0	6	0

Table 11: Summary of the geology of stone samples from the various buildings on site

The dominance of Lower Magnesian Limestone for building fits with the pattern seen elsewhere in medieval Doncaster (Buckland *et al* 1989b, 217). None of the stone was specifically quarried for buildings on this site, and the most likely origin for all this stone is the robbing of nearby buildings, notably the Roman fort and the Norman castle walls.

As virtually no timber survived (only one fragment of carbonised wood was recovered) it is impossible to say which species were being used for construction purposes. It is equally difficult to know what size of tree was being used. The post-holes in Buildings 3–4 and 6, which were of late twelfth-/mid-thirteenth-century to late thirteenth-/early fourteenth-century date, were from 20–50cm in size, whereas the post-sockets built into the walls of the later Building 16 (of mid-fifteenth–sixteenth century) were c.20cm in diameter. This may imply that larger trees were becoming scarcer, thereby forcing the use of smaller timbers for building work. It may, however, simply reflect a change in building fashions or techniques.

Infill panels in the timber buildings would normally be made of wattle and daub. Although there was relatively little daub on site, it was found in association with Buildings 4, 7, 9 and 13, which implies that these buildings at least had wattle and daub infilling. There is no clear evidence for brick nogging infill panels on the site.

Brick came in to general use only from the fourteenth century onwards and was initially a high-status material. The use of brick gradually spread down the social scale and was used notably for its fireproof qualities in features such as hearths and chimney stacks. There is, however, no evidence for the use of brick, even for features such as chimneys, in any of the fourteenth-century or later buildings and its absence may be a reflection of low status.

Building longevity

Tenement Y was the only tenement to have a sequence of buildings relating to Phases 4–17. There were six superimposed buildings (Buildings 2, 4, 8–9, 13 and 16) ranging in date from the end of the twelfth century to the mid-sixteenth century, giving an average building lifespan of c.58 years. This is slightly misleading as there was clearly considerable variation in building longevity. Buildings 2 and 4 were each in use for roughly 50 years, while Buildings 8 and 9 together spanned a period of 50 years (given that no floor surfaces were present in association with Building 8 it may have had an exceptionally short lifespan), and both Buildings 13 and 16 were in use for a maximum of 100 years. The lifespan of the earlier buildings was considerably shorter than the later buildings on site, but this was not necessarily related to the use of sill-walls, as Buildings 8–9 were constructed with sill-walls but were in use for a shorter time than the earlier buildings lacking sill-walls.

Roofing materials

Buildings 1–3 and 12 had absolutely no ceramic roof tile associated with them or within the related tenement yard deposits, while Buildings 5 and 10–11 had very little ceramic tile in associated contexts. This lack of tile implies that these buildings had roofs made of organic materials. In the case of Buildings 5, 10 and 12, the presence of heathland turf or heather in internal surfaces may suggest that these structures were roofed with turf.

The remaining buildings (Buildings 4, 7, 9, 13–14 and 16–17) were associated with both ceramic roof tile fragments and the remains of organic material which could have been used for roofing. In the case of Buildings 7, 9 and 13 straw, gorse and saw-sedge were present, all of which could have been used for thatch (Hall, Kenward and McComish 2003, 142), while the other buildings were associated with heathland turf or heather. The quantity of ceramic tile fragments implies that at least one of these buildings must have been roofed in tile, but it is impossible to determine which buildings were roofed in this way.

Twenty-four contexts contained fragments of stone roof tiles (two from Phase 6, five from Phases 8–9, three from Phases 10–11, six from Phases 15–17, three from Phase 18 and five from Phases 19–20). The relative lack of such material from the medieval tenement phases suggests that none of the buildings had a stone roof; if such material had existed it would almost certainly have been reused within walling on the site. Yet stone roofing tile is widespread on medieval and post-medieval sites in Doncaster (Buckland *et al* 1989b, 217), so the relative lack of this material at Low Fisher Gate may be a reflection of the low status of the buildings on the site. Buildings 6, 8 and 15 were insufficiently preserved to suggest the method of roofing.

Hearths and chimneys

Half of the buildings on site had internal hearths and/or evidence of fires being lit on the ground surface within the building. No internal surfaces survived in Buildings 3, 6 and 8, so it is impossible to know if there were originally hearths, though the fact that Building 6 burnt down implies a hearth or fire somewhere in the structure. No hearths were present in Buildings 5, 12, 14–15 and 17, but these all lay partially outside the excavated area where hearths may have been positioned. Only Building 11 definitely lacked some form of internal hearth/fire, surely a reflection of its function.

None of the hearths was located adjacent to the gable end walls of the buildings, so there is no evidence for gable end chimneys of any form. One hearth in Building 4 was located immediately adjacent to the south-western wall of the building, one in Building 7 was beneath the roof ridge line, and three more hearths, one in Building 9 and two in Building 16, were probably below the roof ridge line. The remaining hearths were placed in a variety of locations within the buildings.

The smoke from the fires/hearths presumably exited through holes in the roof, which implies that the buildings in question were open to the rafters. If internal upper floors had been present the smoke would have been trapped within small unventilated rooms, which seems unlikely. It is unclear whether the hearths had some kind of chimney in the roof above; chimneys could be made of headless/bottomless barrels, and examples of wicker and thatch chimneys are known from vernacular architecture in Wales though these were located at the gable ends of the buildings in question (Lloyd 1985, 93 and 349). An alternative was to have smoke vents in the gable ends of the buildings. The lack of brick chimney stacks is not surprising because most of the buildings on site pre-dated their appearance in the fifteenth century.

Only Building 16 had tentative evidence for a chimney. A hearth in Room B butted the north-eastern internal wall of the room, and had a small kerb in front of it; this kerb was the wall from an earlier building, deliberately left standing above ground level to act as part of the hearth. The location of the hearth adjacent to the wall suggests that some kind of chimney was present, but its form is unknown. This hearth was also associated with a stone-lined pit interpreted as a soakaway, which may imply an industrial function.

The presence or absence of hearths in various rooms within buildings also implies differing room functions; Building 9 had two hearths in Room B but none in Room A; all the hearths in Building 13 were located in the southern range with none in the northern range at the rear; and Building 16 had no hearths in Rooms A and E, but hearths were present in all the other rooms.

Building number	**Date**	**Maximum number of rooms at any given time**	**Evidence of fire damage**	**Turf or thatch present**	**Floor types**	**Food debris present**	**Number of internal post-/ stake-holes or post-pads**
1	Second half twelfth century	1			E		6
2	End of twelfth to mid-thirteenth century	1			E		9
4	Late thirteenth–early fourteenth century	2		Yes	E, G, L	Yes	10
5		1		Yes	C, E		0
7		1	Yes	Yes	E		13
8	First half of fourteenth century	2	Yes				
9		2	Yes	Yes	E	Yes	34
10		1		Yes	E	Yes	2
11		1			E, G		0
12		1		Yes	E	Yes	
13	Mid/late fourteenth century	5		Yes	E, G	Yes	158
14		2		Yes	E, L	Yes	3
16	Mid-fifteenth–mid-sixteenth century	6		Yes	E, G, L, Mo	?	2
17		2		Yes	E, G	Yes	
18	Sixteenth to eighteenth century	1					

Table 12: Summary of building features (no internal features survived for Buildings 3, 6 and 15)
(Key for floor materials:
E = earth, C = cobbles, G = gravel, L = crushed limestone, Mo = mortar)

Floors

The majority of the internal surfaces seem to have consisted of simple earth floors, but it was difficult to tell which of these were deliberately laid floors and which resulted from the trampling in of material. The analysis of environmental soil samples from within Building 16 suggests that flood deposits had been dug up and redeposited as internal floors. The only floors of a more durable nature were the patchy remains of gravel and crushed limestone floors within Room A of Building 4 and in Building 11; the fragmentary remains of a mortar floor were present in Building 16, Room D. A patch of cobbles in Building 5 might also represent the remains of a floor (Table 12).

Some of the buildings had patches of gravel or limestone in doorways or corridors to counteract heavy wear (Building 4; Building 13, Room C; Building 14, Room D; and Building 17, Room B). A patch of gravel was also laid to create a firm surface prior to the insertion of a hearth in Building 16, Room D. In addition, limestone rubble was used to infill wear-hollows in Building 16.

A number of plain glazed floor tiles of fourteenth- to sixteenth-century date, probably of Flemish origin, were found, but none was associated with the excavated buildings. The tiles were recovered from the Phase 14 flood deposits, the large pit and livestock-watering pond of Tenement X3/Y in Phases 16–17, the Phase 17 garden deposits of Tenement Z and the garden soils of Phase 18. These tiles are best regarded as material brought from elsewhere and dumped on the site.

Windows

Throughout the medieval period few houses had glazed windows. In the fifteenth century window glass began to appear in upper-class housing, but in 'ordinary houses glass windows were regarded as luxuries' (Salzman 1952, 185). No medieval or early post-medieval window glass was found on the site, suggesting that the windows in the buildings were unglazed.

THE POTTERY REPORT

INTRODUCTION

The pottery assemblage from Low Fisher Gate includes just under 22,500 sherds from twenty phases of activity identified on site. Chronologically it spans the mid-twelfth century to the late post-medieval period.

The value of the assemblage lies in its size and the stratified contexts from which it was recovered. Inevitably, however, after several hundred years of occupation on the site, at least one major flooding episode and evidence for the importation of material onto the site, the assemblage has been affected by the twin distortions of residuality and intrusion. The construction and modification of structures, with the associated foundation and pit digging, has disturbed earlier deposits, producing a residual element throughout. Although the assemblage is overwhelmingly domestic in character, there is a suggestion that the site may not have had a primarily domestic function; the provenance of some of the material must, therefore, be questioned. Added to this, the location of the site, on a slope down to the river, might mean that a proportion of the assemblage derives from dumping and ground-levelling activities rather than providing evidence of occupation. These caveats having been entered, however, the assemblage usefully charts the rise and fall of the major types of pottery in circulation in Doncaster and provides a structure against which to understand the more minor types. These contribute to understanding the chronological framework for the site and will hopefully provide a useful benchmark for future work in the city.

It is worth reviewing briefly the state of knowledge regarding Doncaster's post-Roman pottery in order to understand the value of the Low Fisher Gate assemblage. Only a handful of early and middle Saxon pottery (fifth–ninth century) has been recognised in Doncaster and these examples were found scattered in and around the Roman fortress (Alvey 1989, 365). Late Saxon pottery including Stamford, Torksey-type and gritty wares has been recovered but again these types are scarce and scattered (*ibid*, 366).

Research on Doncaster's pottery began in earnest with material found in the 1960s, together with evidence for pottery production. This resulted in the establishment of Hallgate wares A, B and C, which were believed to have been produced from the twelfth to fourteenth centuries (Buckland *et al* 1979). This work became the foundation for understanding Doncaster's pottery as it identified the main types and labelled the red-firing Hallgate type A, the white-firing Hallgate B and the grittier Hallgate C wares. Subsequent work, including that at Low Fisher Gate, has built on these findings.

Since then the evidence for pottery production in the city has been pulled back into the late eleventh century by the recognition of an earlier range of related wares. Splash-glazed wares produced from both red- and white-firing clays, as well as a range of other sandy, gritty and shelly wares, have been identified at a number of sites. Hayfield (1984, 41) established a possible precursor of the Hallgate C wares from a group of wasters found in a feature resembling a kiln at the Market Place. These included pitchers, cooking pots, jugs and other forms, frequently coil-built and with a splashed rather than a full suspension glaze, which he dated to between the eleventh and the first half of the twelfth century. Alvey, in his work on groups of pottery from across the city, noted a 'hard, smooth-textured, and finely sand-tempered [fabric] reminiscent of the more heavily tempered "A" form' and also noted 'a small number of pieces of the white Hallgate "B" fabric with splashed glaze', for which he suggests a brief mid-twelfth-century occurrence. More recently Cumberpatch (1998–99) has published findings from another possible production site on Hallgate (Hallgate 95). He identified a number of splashed glazed ware types including those he labelled DHG95 A1, being 'directly related' to Hallgate A (*ibid*, 51), and another type he compared to Hallgate C, within which he identified a main type and two variants. These were found together with what he believes are other locally produced fabrics, D, E and F (*ibid*, 51–52). Other sites in Doncaster have produced similar material underpinning their stratigraphic sequences. A nineteenth-century cellar deposit, at the St George's 1972 site (Buckland *et al* 1989a, 90), for example, produced a small amount of these types during excavations prior to the construction of the new Church School (Buckland *et al* 1989b, 366) but had no independent dating.

These findings suggest that pottery production in Doncaster has its origins in the eleventh century and that there is a direct development from these early beginnings to the late twelfth- to fourteenth-century flowering of the Hallgate products. These early products are thought to compete with those of other splash glazed industries, including products of the Beverley kiln, at a time which has been described as one of expansion and innovation, reflected in the increase in the number and type of pottery products (Buckland *et al* 1979, 369).

These early assemblages also contain a range of wares which were contemporary with the early Hallgate-type wares. These include Stamford wares, reduced wares, various types of sandy and gritty wares, and shelly wares. Together with the splashed wares described above, these types set the scene for the Low Fisher Gate assemblage.

The evidence discussed below suggests that the sequence recovered at Low Fisher Gate does not begin before the middle decades of the twelfth century and even then only a few features of this period were identified and a very small assemblage recovered. The Fisher Gate assemblage picks up the story more convincingly in the second half of the twelfth century and confirms much of the preceding work which identified a proliferation of different types of pottery competing for the late twelfth-century market in Doncaster. This corresponds to a time when the splashed wares are understood to develop into fully glazed wares, roughly around the late twelfth/early thirteenth century. The original Hallgate kiln wasters (Buckland *et al* 1979) mark the introduction of suspension glazes at about this time (Buckland *et al* 1989b, 371). The Fisher Gate site produced seconds or wasters from Phase 6 onwards although there is no evidence of production on the site and the material is believed to have been imported from elsewhere.

Regional wares, notably from Lincolnshire, the Humber basin and other parts of Yorkshire, account for a varying proportion of the assemblage throughout the sequence. Foreign imports at this time are rare and limited to a few sherds of white-firing pottery of French origin.

As the sequence develops it is possible to follow the main development of ceramic types through the successive phases. This has been done in broad outline as part of the summary of the stratigraphic sequence (above). The pottery has made some contribution to establishing a chronology for the site. In the absence of independent dating, the relative proportions of the pottery are the main planks of this chronology, with regretably little to confirm it. One possibility which emerges from this study is that pottery production in Doncaster did not cease in the early fourteenth century but continued into the middle decades of that century. After this South Yorkshire coal measure fabrics from the Don Valley, including Conisborough, Firsby, Swinton and Rawmarsh, and the Cowick and perhaps Holme-on-Spalding-Moor types of Humber wares become more significant, and new forms such as drinking jugs, chafing dishes, cauldrons and bung hole cisterns begin to emerge. As with many English sites of this period, small numbers of German stonewares and Low Countries red wares are also in evidence.

By the late fifteenth century small quantities of Tudor green wares occur and coal measure and red ware types become purple glazed, a phenomenon associated with pottery from this area and across Yorkshire and the North-East from the fourteenth century onwards. This fashion may have reached its climax in the sixteenth century with the advent of the Cistercian types.

There is little material of the late post-medieval period and what there is derives from horticultural deposits and is little help with site interpretation.

METHODOLOGY

The pottery was quantified and recorded in the standard manner (see Orton, Tyers and Vince 1993). It was sorted into fabric and form groups, based on colour, firing, clay matrix, inclusions and glaze type, and the given a coding. Where possible these groups were related to known types from the area. The number of sherds, weight, base and rim diameters were calculated and these can be found with the archive, together with all the details of the numbers of different wares per phase, group and set. These total quantifications are summarised as site-wide bar charts for the phase discussions above (Tables 2–8).

As it is generally agreed that weight and number of sherds provide the most useful index of quantity (Brooks 1987, 116; Cumberpatch 1996, 55), these methods were concentrated on here. The bar charts used in the tables in the text show the number of sherds present as a percentage of the total assemblage for each phase. This calculation was made in order to be able to compare phases with significant variation in total numbers of sherds. Weights are given in the archive.

Where possible, the identification of the various local and regional fabrics was backed up by microscopy and in selected cases by thin section and ICPS (Inductively Coupled Plasma Spectroscopy), carried out by Alan Vince. His full report remains in archive, with the main points summarised in the following sections. The shelly wares were visually identified by Jane Young.

The following report comprises two main sections. The first looks in more detail at the ceramic sequence on one of the tenements, Tenement Y. Through much of its occupation, the site was organised into three tenements, which were later subdivided and rearranged. The most complete and largest of these was Tenement Y and, in discussion with the site director, this was selected for further study as it offered the most reliable and least disturbed sequence. While the bar charts given in the phase discussions above give the big picture, those in the Tenement Y discussion give a closer look at that sample area of the site. Where wares are mentioned in the text but do not appear as individual bars in the chart, this indicates that they comprised less than 1% of the assemblage and have been grouped together in the 'other' column. Details are in the archive.

The second section provides an illustrated discussion and catalogue of the different wares, their forms and significance. The main findings are brought together in the concluding section.

DISCUSSION OF THE POTTERY RECOVERED FROM THE STRUCTURAL SEQUENCE IN TENEMENT Y

There is limited evidence for structures on this part the site in the earliest phases (Phases 1–3). Throughout the remaining phases, however, a succession of buildings was constructed, used, modified, destroyed and replaced through the five or six hundred years of occupation. The clearest sequence of deposits and best-preserved traces of these structures comes from the largest of the tenements, Tenement Y. The resultant pottery sequence from these deposits offers a more focused, and perhaps more reliable, picture of ceramic development than the complete site assemblage as discussed and presented in broad outline above.

As is inevitable on urban sites over such a long period, the picture is distorted by material upcast during the digging and modifying of foundations as new structural arrangements were put in place, and by the importation of levelling material. Nevertheless, it was judged that this tenement was the least disturbed and worth closer examination.

The sequence of structural evidence on Tenement Y shows that buildings were constructed, modified and replaced on a regular, perhaps even generational, basis. Ascribing absolute dates to this structural sequence, however, is difficult as there is no independent corroboration for the pottery dates. The cumulative dating evidence from previous excavations in Doncaster, especially for the currency of the Hallgate industries, provides something of a benchmark. This is augmented by dating offered by the established currencies of other regional wares such as Humber wares and Lincolnshire shell-tempered wares, as well as other minor types, including foreign imports. The relative proportions and associations of these types have been used to build a chronology and to help interpret the use of the site.

Phase 4, Building 2

The beginning of Phase 4 represents the laying out of three tenements on the site. Tenement Y occupied the central and largest area of the excavation. Building 2 is the first building in the tenement, built towards the end of the twelfth century and probably the precursor of a more substantial structure, Building 4, which appears in Phase 6. The pottery recovered from Building 2 is shown in Table 13.

The table shows that the various gritty wares (buff, oxidised, reduced and white) account for between 1% and 7% of the wares at this time (a total of 15%), with reduced grey wares, mainly of the Grimston-Thetford type but including other grey wares, accounting for a further 8%. As discussed below, these sandy grey wares are difficult to distinguish visually and, in some cases, their provenance remains uncertain. Forms represented are mainly small jars, with a single example of a pitcher with applied broad thumbed strips.

The main types of pottery at this time are those which are closely related to the Hallgate A industry. This includes splashed wares type 1 and sherds defined as splashed wares type 1/Hallgate A types; both are clearly part of an evolving ceramic product which later becomes the dominant Hallgate A type. Hallgate A wares with full suspension glaze are also recognisable at this time (less than 5%). Together these three closely related groups account for just under 40% of the assemblage.

Amongst the Hallgate A and splashed ware variants, pitchers are the dominant form. This is also true of the other splashed wares, type 2 (a possible South Yorkshire type) and type 5 (Beverley type). Jars dominate in Hallgate B and C wares, which each account for 3–4% of the assemblage.

The other main types of pottery in Phase 4 are the shelly wares which in total

Table 13 Phase 4 Building 2

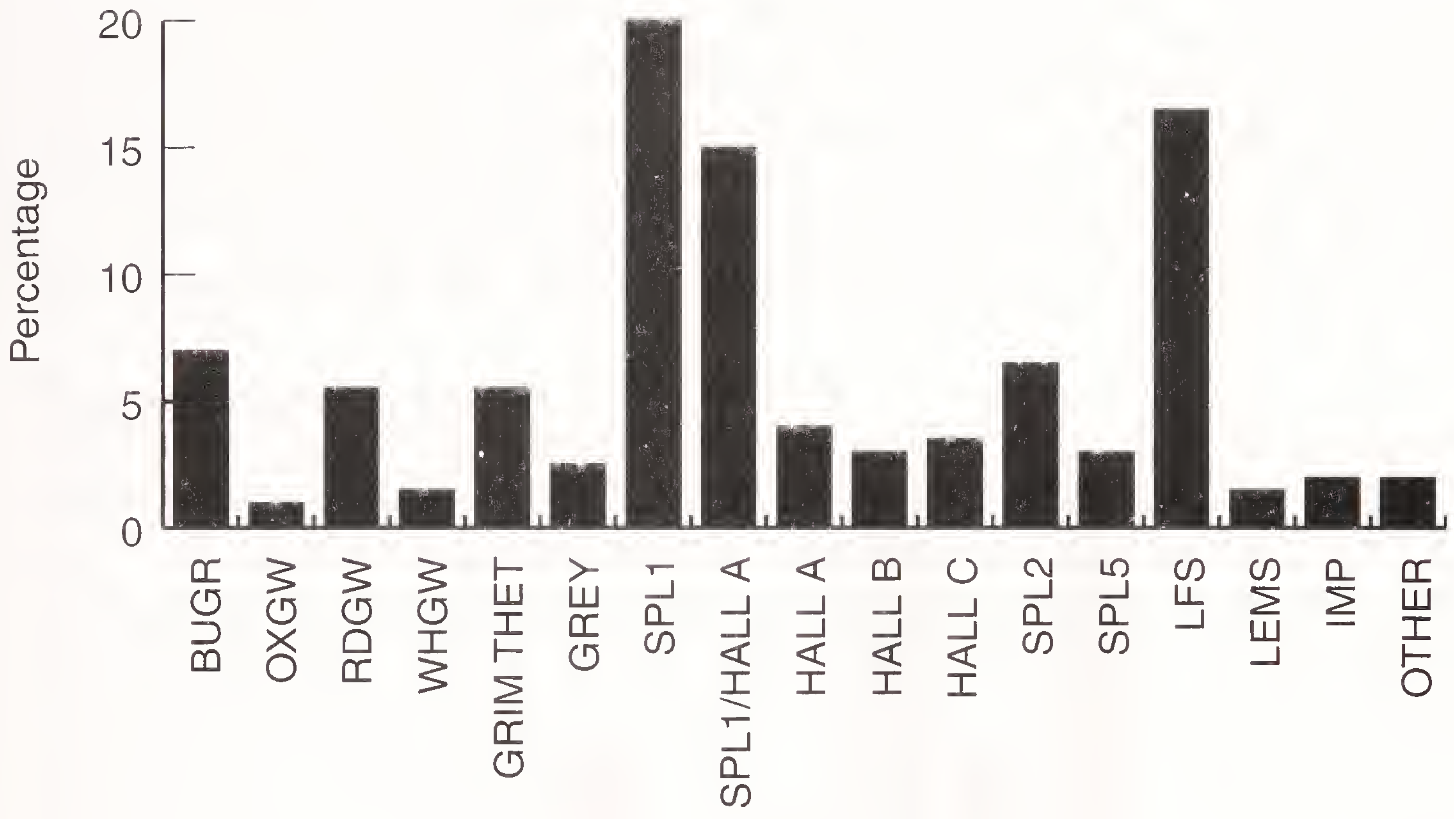


Table 13: Percentages by sherd count Phase 4, Building 2

account for 18% of the assemblage, the greater proportion (16.5%) of which are jars and bowls of the Lincoln fine-shelled wares, with the local early medieval shelly wares being only a minor contributor. As these latter wares are understood gradually to replace the Lincoln fine-shelled ware in the course of the twelfth century (Young and Vince 2005, 88, 113), it is likely that many of the Lincoln fine-shelled ware in Phase 4 are residual from earlier activity. The main quantifications given for Phase 3 (Table 2 above) show they were more significant in earlier deposits.

Minor wares include a small quantity (2%) of fine white sherds which might be French imported wares (IMP) and a category referred to as 'other' wares. This category includes types which individually account for less than 1% of the assemblage and are mainly minor types of splashed wares.

Ascribing a precise date to this phase is difficult, but it probably belongs to the second half of the twelfth century, with at least a proportion of the pottery being residual from Phase 3 activities on the site which was upcast during building construction.

Phase 5, Building 2

This same building continued to be used and modified during Phase 5. Table 14 shows the material which relates to Building 2 and its immediate surroundings. The bar chart shows a similar pattern of pottery to that recovered in Phase 4, but there are some notable differences.

Gritty and grey wares have diminished in both quantity and the range of types represented. Hallgate A and the related splashed wares type 1 still account for just under 40% of the assemblage, with fully developed Hallgate A increasing its contribution. Hallgate B wares have increased in quantity to account for 24% of the whole. Other splashed wares (types 2 and 5) each make up less than 10% of the assemblage, and the relative proportion of shell-tempered wares has also fallen. This total must include material from reworked deposits, especially in the case of the Lincoln fine-shelled wares which are understood to be at the end of their currency.

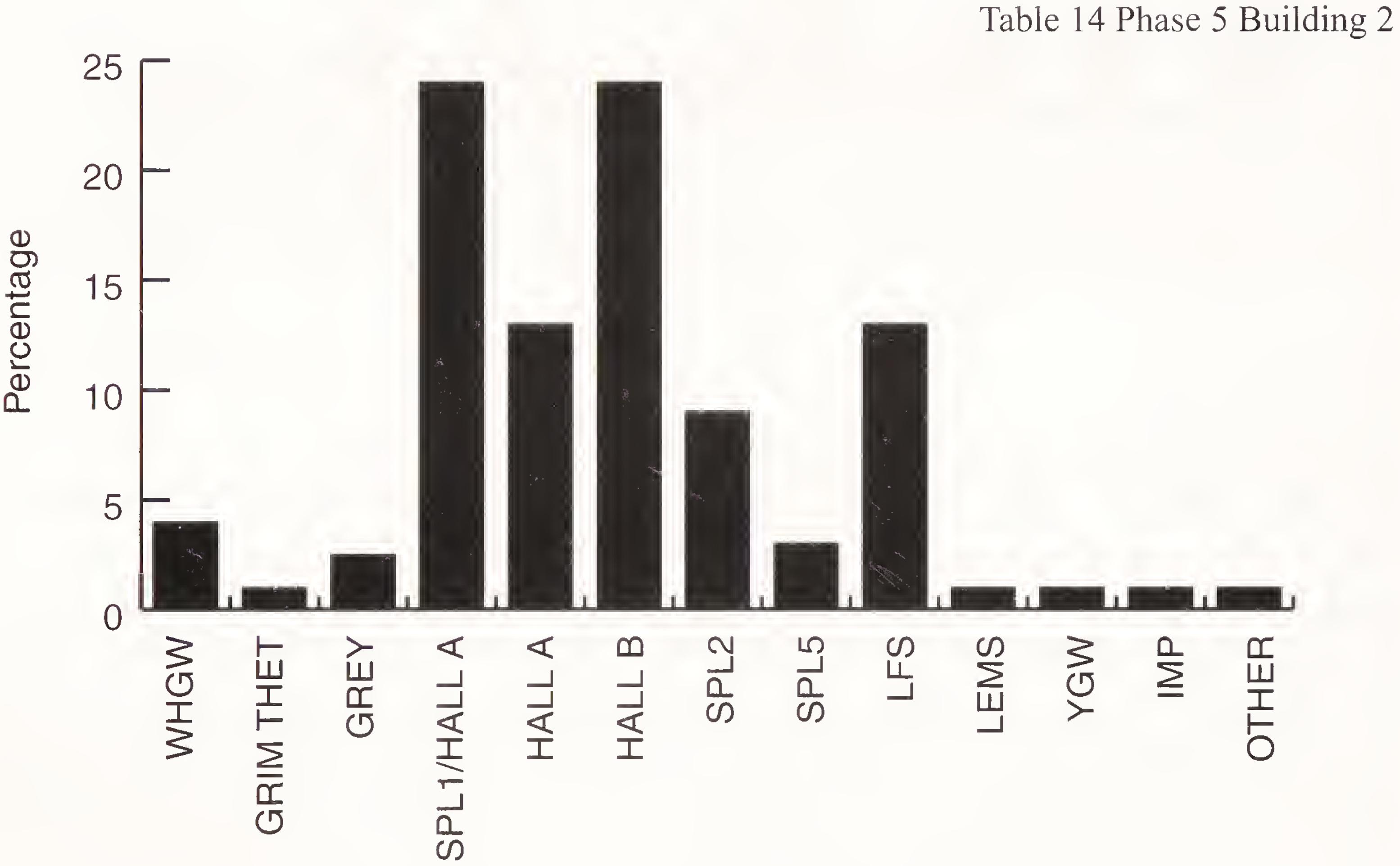


Table 14: Percentages by sherd count Phase 5, Building 2

Phase 6, Building 4

In this phase Building 2 is replaced by the two-roomed Building 4, a post-built structure with earth floors and hearths. The pottery from this building continues the trend seen in the previous phase (see Table 15).

Once again the gritty wares and grey wares account for very little of the assemblage (less than 10% in total) and various splashed wares continue to be present in small amounts (with the exception of splashed ware type 1, see below); again a proportion of these are likely to be residual. Amongst the shell-tempered wares there is a slight increase in the local early medieval shelly wares and North Lincolnshire shelly wares make their first appearance; the quantities of Lincoln fine-shelled wares continue to decline (now less than 10%) and must include significant amounts of residual material. There is also a small amount of developed Stamford ware. 'Other' wares (less than 1% each) include buff gritty wares, oxidised gritty wares, reduced gritty wares, other splashed wares, Rouen and Saintogne imports, York glazed wares, and other unclassified reduced and gritty wares.

The picture in Phase 6 is dominated by the Hallgate A and B products, which between them account for about 60% of the assemblage. The Hallgate A wares and the related splashed ware type 1 constitute just over half of this (31.5%) while the Hallgate B wares continue to be of slightly less importance (27%); Hallgate C wares make up only just over 1% of the assemblage.

A new feature of this phase is the appearance of seconds or waster material in Hallgate A-type fabric; these make up 2.5% of the assemblage although this increases over time (see Phase 9). As there is no evidence for pottery production on the site, theses sherds might derive from imported material which was dumped on the site or was brought in as levelling material. The evidence from successive phases suggests that either this was a continuing activity or that material was reworked through succeeding deposits. It is also possible that some of the sherds are from what were viable Hallgate A vessels used as 'seconds'. Forms include pitchers, skillets and jars, while bowls and jars are more common in the Hallgate B range. Decoration on Hallgate A forms, particularly pitchers, includes wavy incised lines, scales and applied strips, while combed strip decoration is more common on Hallgate B forms. This phase, which probably dates to the second half of the thirteenth century, occupies a time when the Hallgate products were flourishing.

Table 15 Phase 6 Building 4

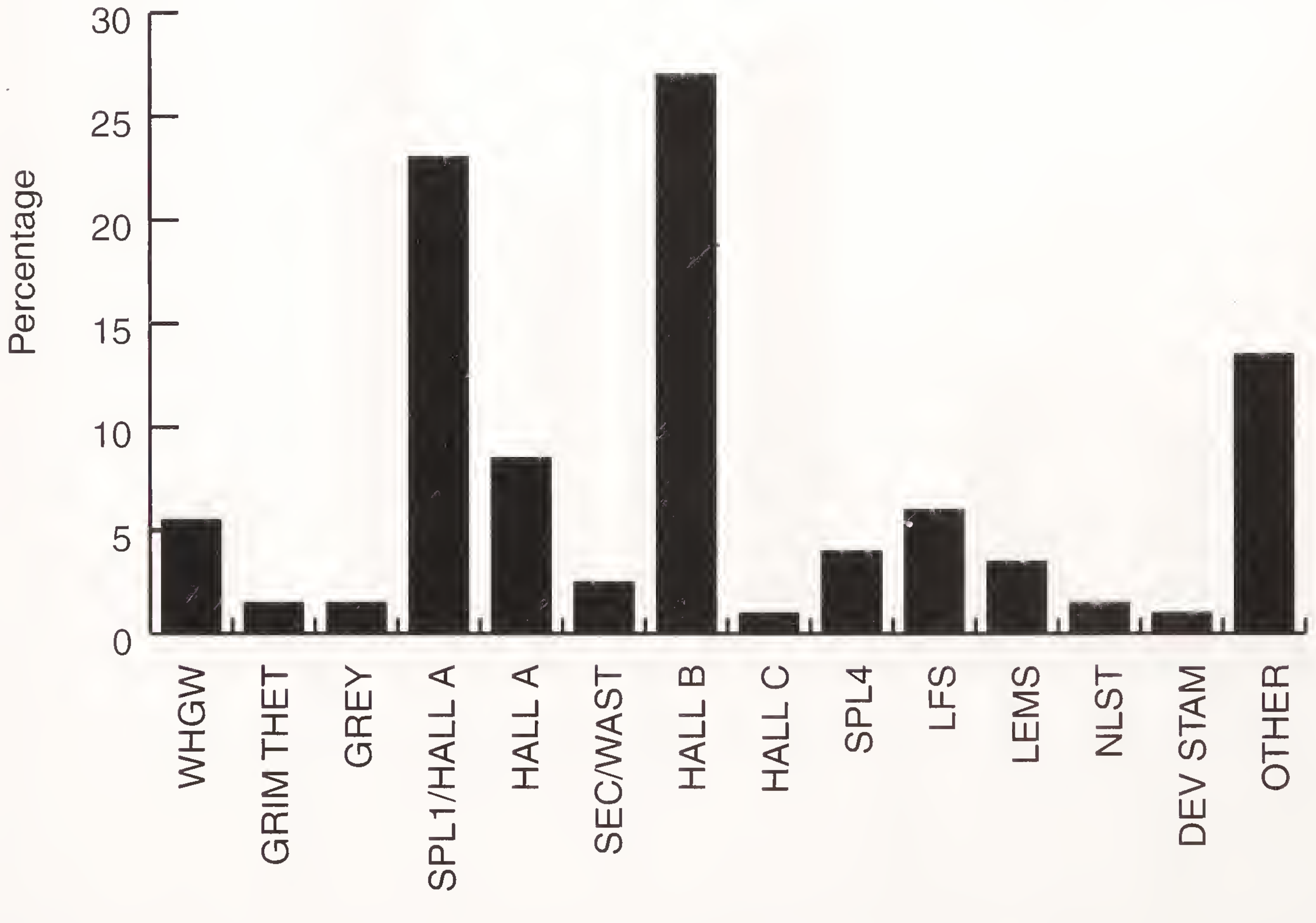


Table 15: Percentages by sherd count Phase 6, Building 4

Phase 7, Building 4

Further modifications occured within Building 4 in Phase 7, a phase which terminates with the end of use for this building.

The pattern of pottery types from this phase is very simple (see Table 16). It is dominated by the Hallgate A types (42%), with the earlier splashed variety adding only a small proportion (1.5%) to this total, suggesting that the industry is in the main phase of its operation. The other main ware is Hallgate B, which accounts for 30% of the assemblage. With the exception of buff sandy wares (BWSN) which make an appearance at this time, all other types, including the grey wares and shelly wares, are each represented by less than 2%.

Those wares which account for less than 1% of the assemblage (in 'other') include a few sherds each of developed Stamford ware, early medieval handmade wares, Hallgate C wares, Humber ware, Scarborough ware, various splashed wares, local early medieval shelly wares and white gritty wares. A late thirteenth- or very early fourteenth-century date is suggested for this phase.

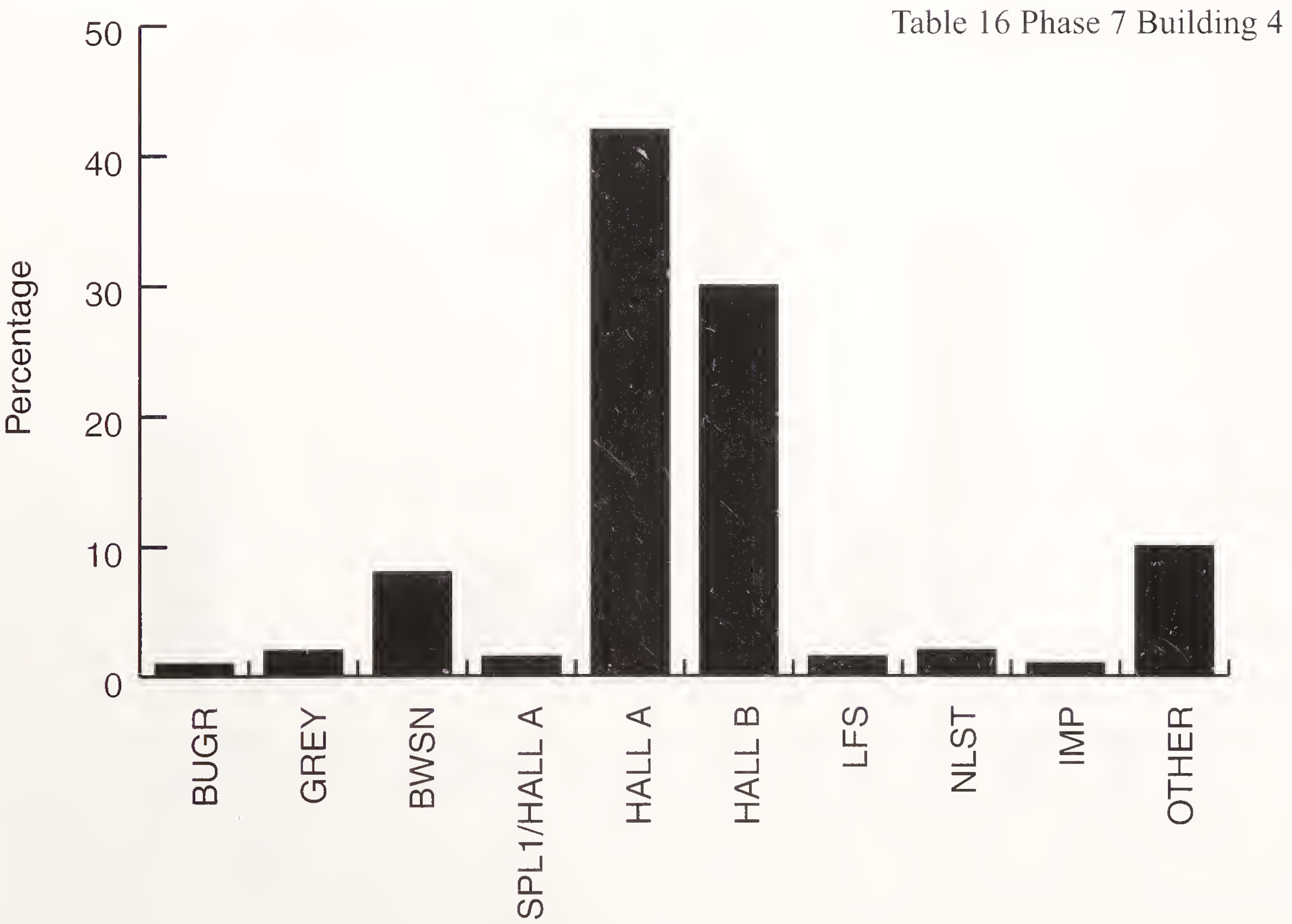


Table 16: Percentages by sherd count Phase 7, Building 4

Phase 8, Building 8

A new building with stone sill-walls was constructed in Tenement Y. This had only a brief lifespan and was soon modified into the L-shaped Building 9.

The pattern of pottery from this structural sequence (Table 17) repeats the earlier trends, with Hallgate A and Hallgate B wares dominating the assemblage (30% and 20% respectively). The three types of shelly wares account for 2–2.5% each but it is likely that this includes residual material. The digging of trenches for the stone sill-walls will have disturbed earlier deposits and this activity might explain the presence of various types of gritty, sandy and splashed wares (WHGW, SPL2, BWSN). This might also account for the quantities of early medieval handmade wares and similar sandy grey (EMHM/GREY) wares. Significant, however, is the first appearance of Humber wares, which account for 12.5% of the assemblage. The category of 'other' wares includes buff gritty wares, developed Stamford ware, York glazed ware and possible purple glazed ware, which might simply be overfired Humber ware, as this would be an unexpectedly early occurrence.

Modifications to Building 8 as it evolved into Building 9 offer a somewhat more focused picture (Table 18), which once again stresses the overall domination of Hallgate A (43%), with Hallgate B wares accounting for most of the rest of the assemblage (23.5%). No other type, apart from splashed ware type 1 which is likely to residual by this time, accounts for more than 5% of the assemblage.

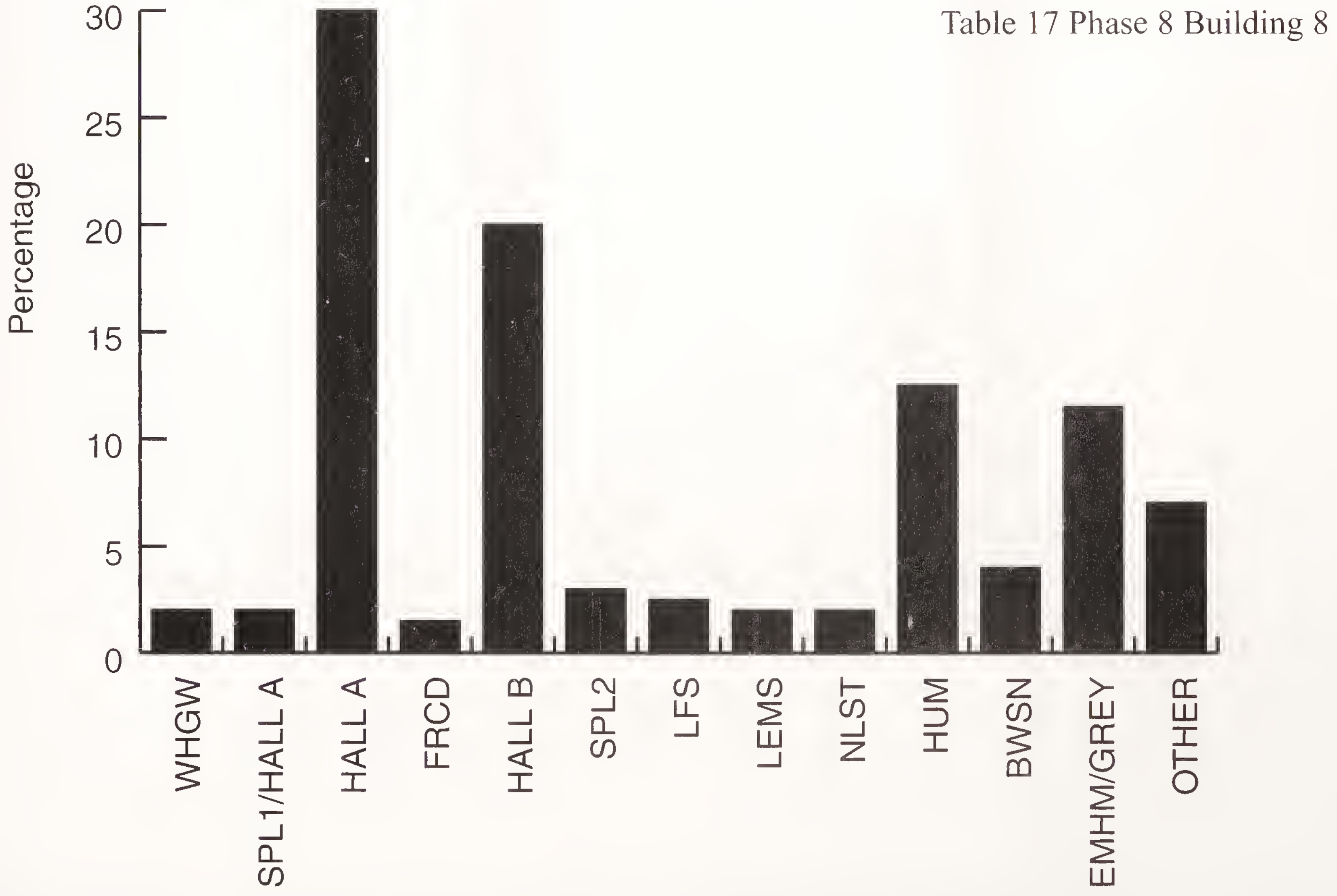


Table 17: Percentages by sherd count Phase 8, Building 8

Phase 9, Building 9

Building 9 was further modified during Phase 9. Table 19 presents the pottery from deposits related to some form of adjacent external industrial activity on Tenement Y, while Table 20 illustrates the assemblage from dump deposits over the structure.

Table 19 suggests a dramatic decline in Hallgate B wares which drop from 23.5% of the assemblage to 7%. Hallgate A wares, by contrast, occupy an even larger part of the market, rising from 43% to 57.5%. Buff/white sandy wares and reduced grey wares each account for 6.5%, while of the shelly wares only the North Lincolnshire shelly wares are represented. Buff gritty wares (BUGR) and early medieval handmade wares are present in small amounts, while Humber and Scarborough products indicate a continuing contact with production sites in the north and east of Yorkshire.

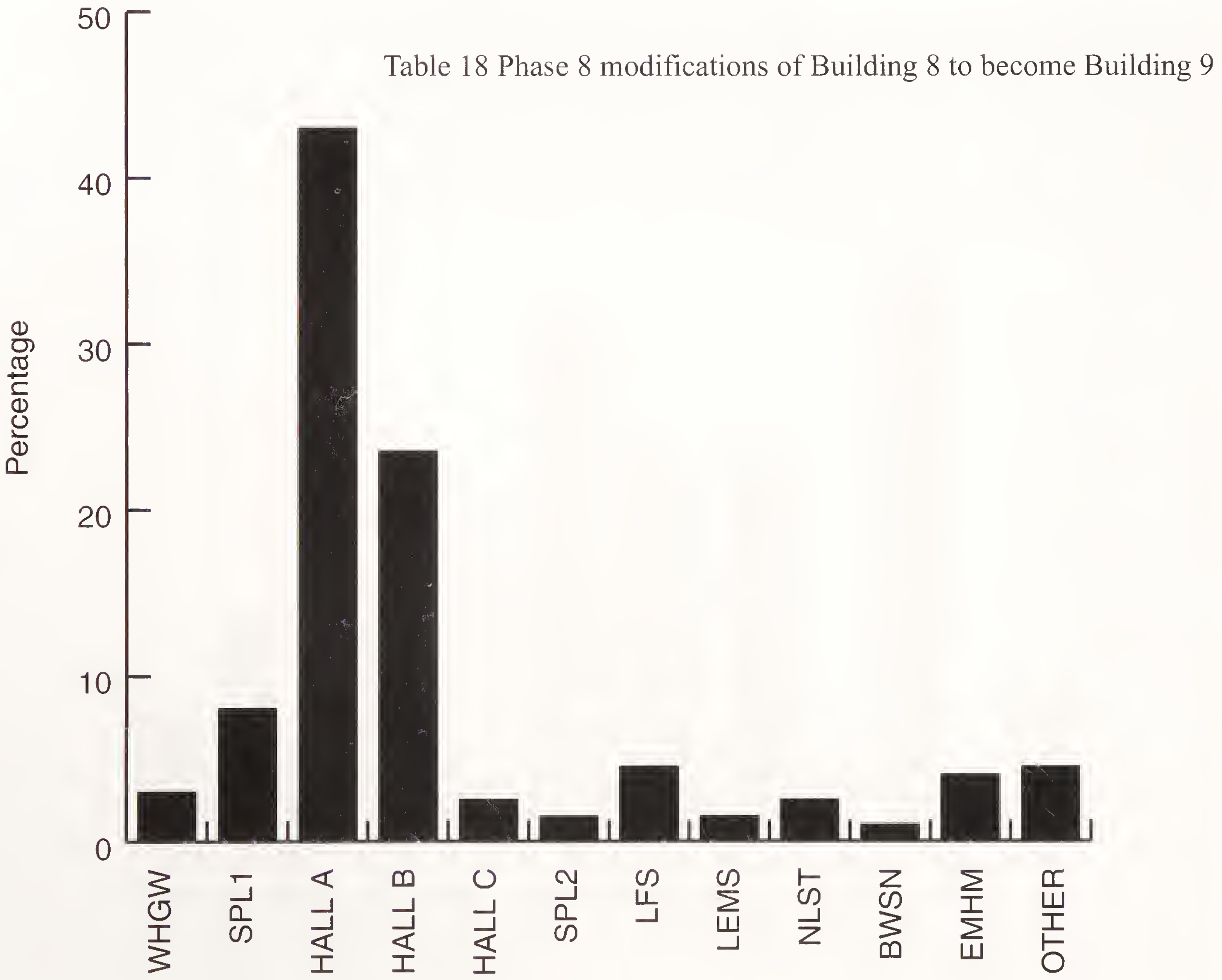


Table 18: Percentages by sherd count Phase 8, modifications to Building 8 to become Building 9

At the end of its life there was an extensive dump of silty clay over the remains of Building 9. As might be expected, these dumps contained a great variety of wares which must represent a mixture of residual and contemporary material (see Table 20). The twin peaks of Hallgate A and Hallgate/splashed ware 1 account for 36% of the material and a further 3% are Hallgate A wasters. This strongly suggests the importation of material from beyond the excavated area or the reworking of earlier dumps which had included similar material (e.g. Phase 6). Of interest is the relatively high proportion (9.5%) of North Lincolnshire shelly wares (c.1120–1400, Young and Vince 2005, 275) and the first appearance of the Potterhanworth

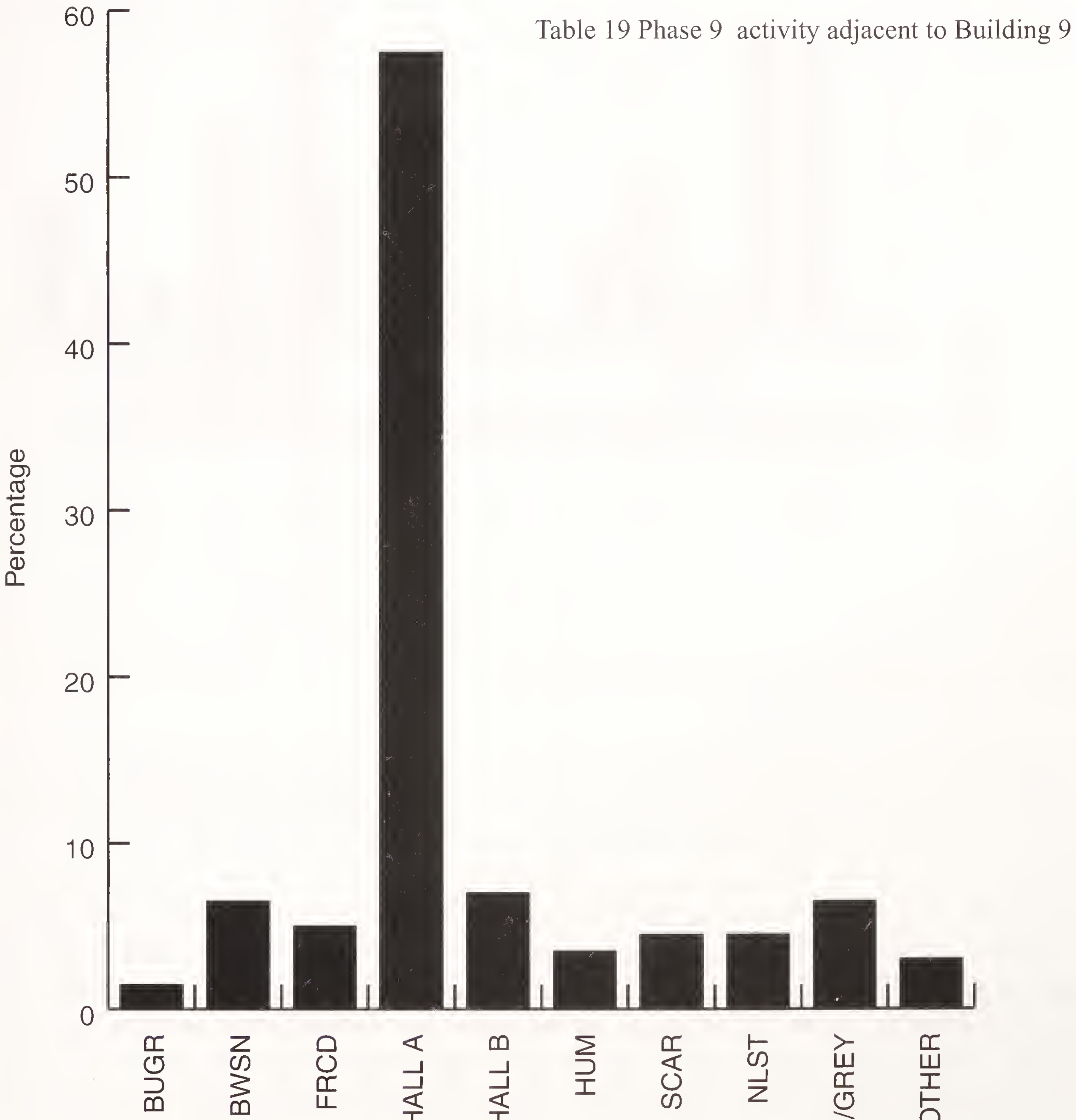


Table 19: Percentages by sherd count Phase 9, activity adjacent to Building 9

shell-tempered wares (1.5%), which are produced from the early/mid-thirteenth century until the late fifteenth century (*ibid*, 170).

The category of 'other' shown on the chart includes less than 1% of twenty-four other wares, emphasising the very mixed character of this deposit. These include unclassified wares, buff glazed wares, buff gritty wares, buff sandy wares, oxidised gritty wares, reduced gritty wares, splashed wares, Hallgate C wares, wasters in a Hallgate C-type fabric, developed Stamford ware, Scarborough ware, Humber ware, imported French wares and white coal measures wares. A date in the early/mid-fourteenth century is tentatively suggested for this phase.

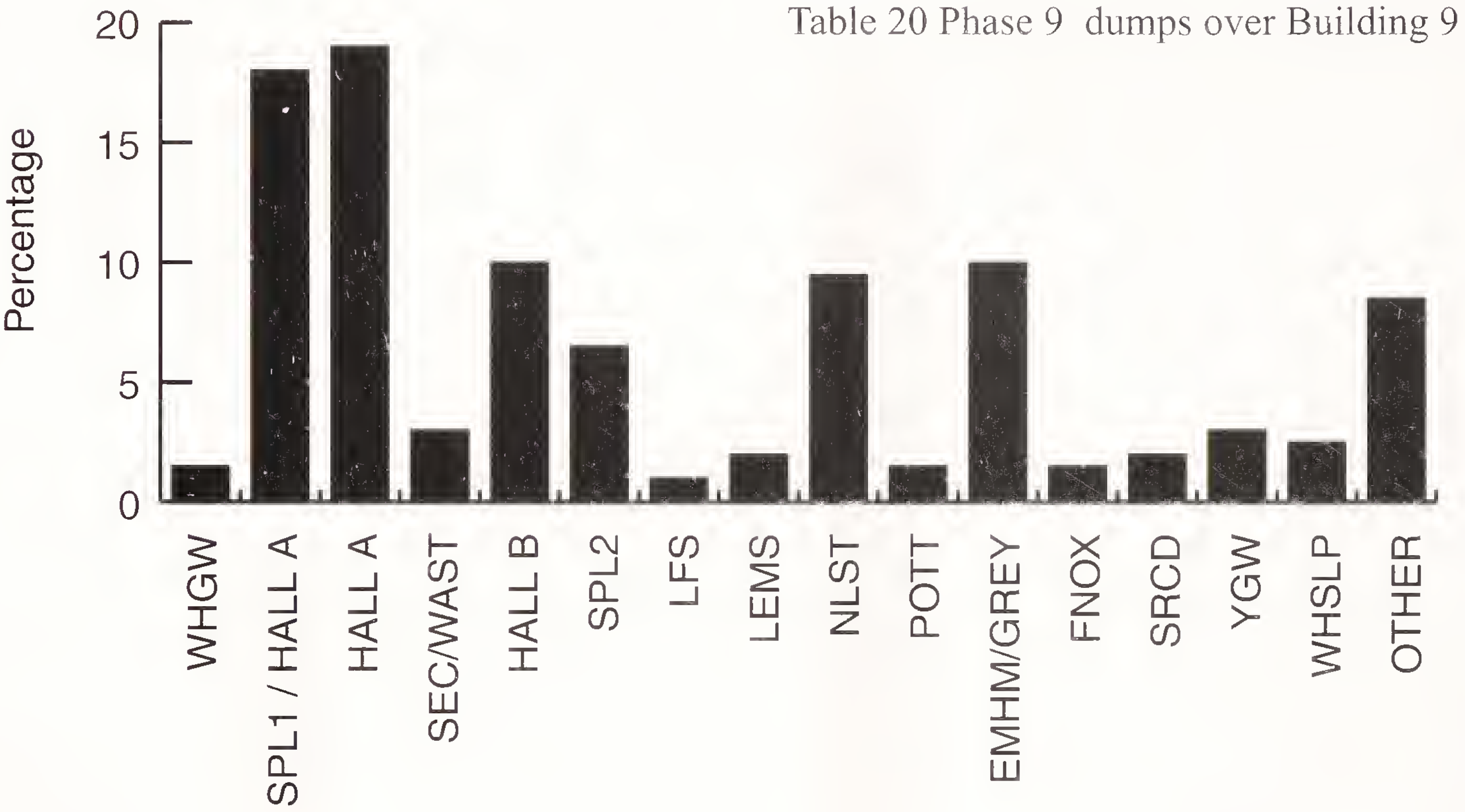


Table 20: Percentages by sherd count Phase 9, dumps over Building 9

Phase 10, Building 13, Rooms A and B

Building 13, a three-roomed L-shaped building, replaced Building 9 and extended into what had previously been part of Tenement X. Table 21 shows the material which relates to the construction and use of Rooms A and B.

Almost 50% of the material recovered from these deposits comprises Hallgate A second/waster material. It is likely that this was imported onto the site as part of the dumping seen in the earlier phase and upcast during construction of Building 13. Hallgate A material accounts for a further 20% of the assemblage, while Hallgate B wares disappear almost entirely (less than 1%). The only types representing more than 2% of the assemblage are Humber ware (2.5%) and Potterhanworth ware (6%). The 'other' category of wares (less than 1% each) includes at least nine different wares: unclassified wares, buff/white sandy ware, oxidised wares, reduced gritty wares, white sandy wares, various splashed wares, Hallgate B ware, York glazed ware, imported wares.

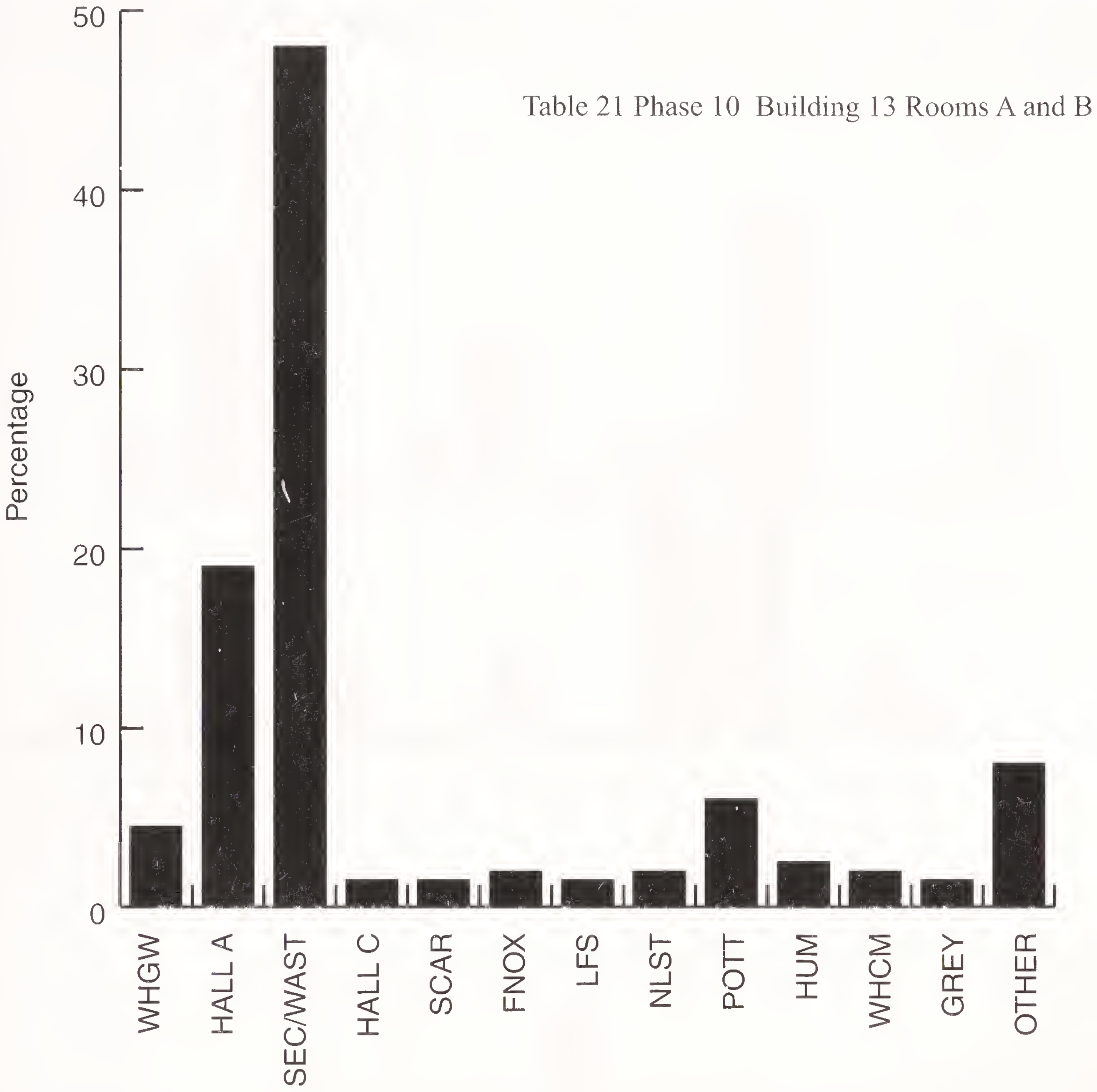


Table 21: Percentages by sherd count Phase 10, Building 13, Rooms A and B

Phase 10, Building 13, Room C

The assemblage which relates to Room C shows a similar pattern with one or two differences.

Hallgate A wares account for 32% of the assemblage and seconds/wasters in this material for 12.5%. Hallgate C wares have risen to 15% in this phase. Humber wares account for 9% and Potterhanworth wares for 4.5%. The presence of residual material is signalled by the continuing presence of Lincoln fine-shelled ware as well as earlier gritty and splashed wares.

Phases 10 to 13 are of short duration; on the basis of the pottery, they belong to the middle and second half of the fourteenth century. It is at this point that it becomes difficult to be certain whether the continuing peaks of Hallgate A wares represent continuity of production and use, or the reworking of earlier deposits.

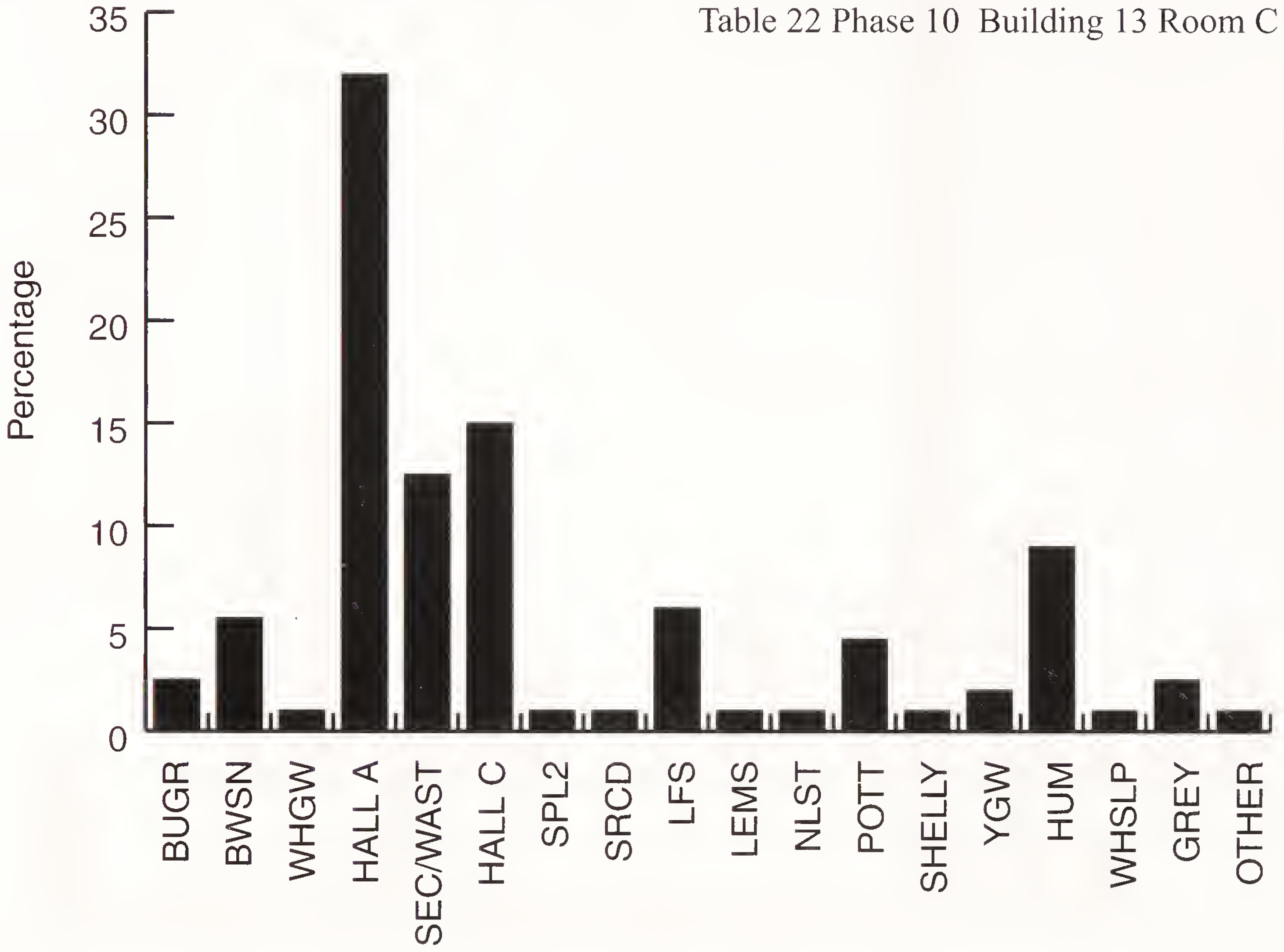


Table 22: Percentages by sherd count Phase 10, Building 13, Room C

Phase 11, Building 13: alterations to Rooms A and B

The assemblage recovered from modifications to Rooms A and B shows some changes in the proportions of different wares although Hallgate A (at 26%) is still the most important ware type. Buff/white sandy wares (BWSN) and oxidised sandy wares (OXSN) between them account for a further 25%, while coal measures types (PURPCM and WHCM) account for almost 20%, the largest proportion being of purple glazed coal measures wares. All other types are represented by less than 5%. 'Other' wares include unclassified wares, other possible coal measures, North Lincolnshire shelly wares and other splashed wares which are individually less than 1% of the total, and largely residual.

Table 23 suggesst that the production and supply of pottery evolves as the fourteenth century progresses. The evidence might support the beginning of a decline in Hallgate A production soon after the mid-fourteenth century though pinpointing absolute dating without independent confirmation is hazardous. There are still a large proportion of these wares, but by this time they had been in production for some considerable time and deposits on the site had been reworked.

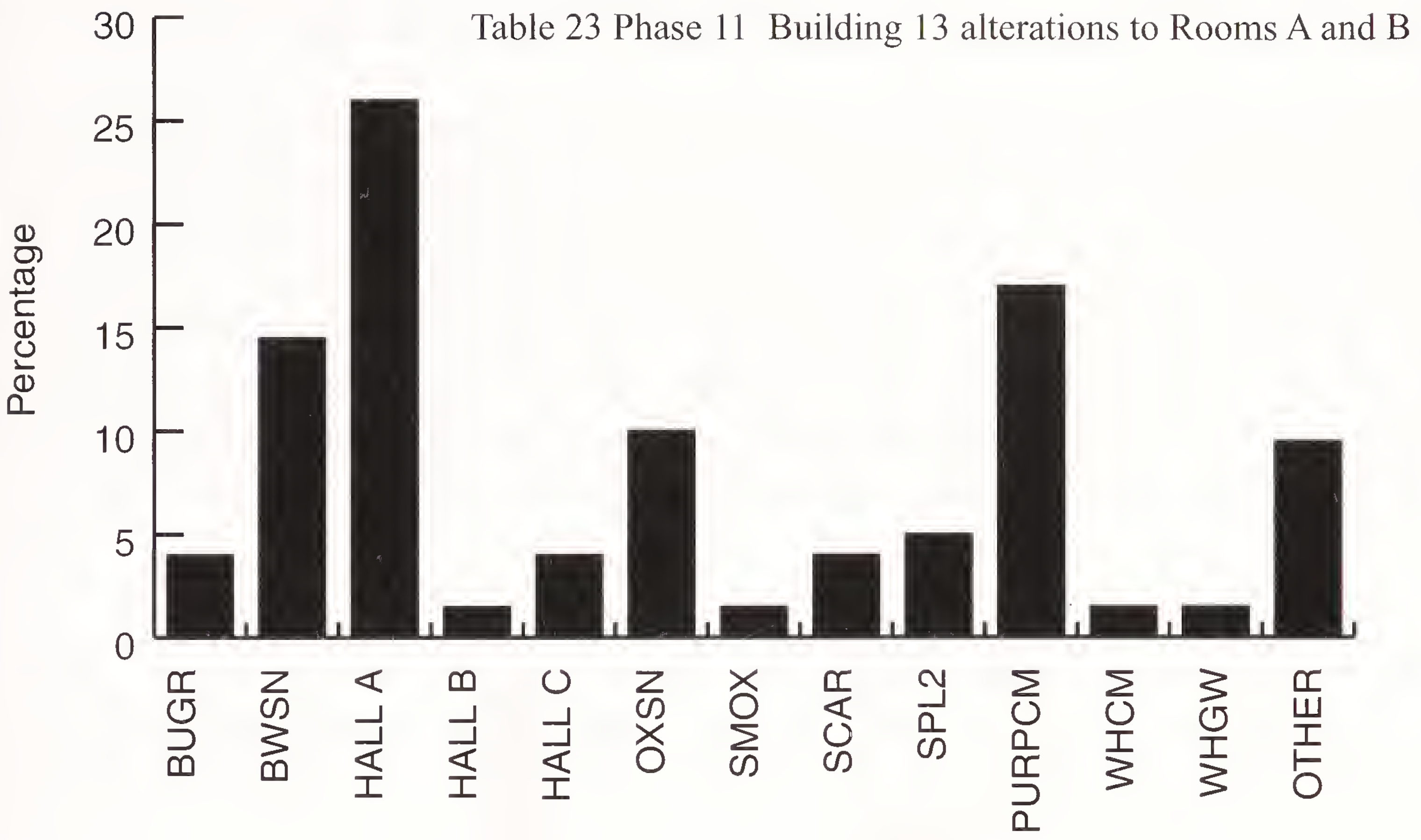


Table 23: Percentages by sherd count Phase 11, alterations to Rooms A and B

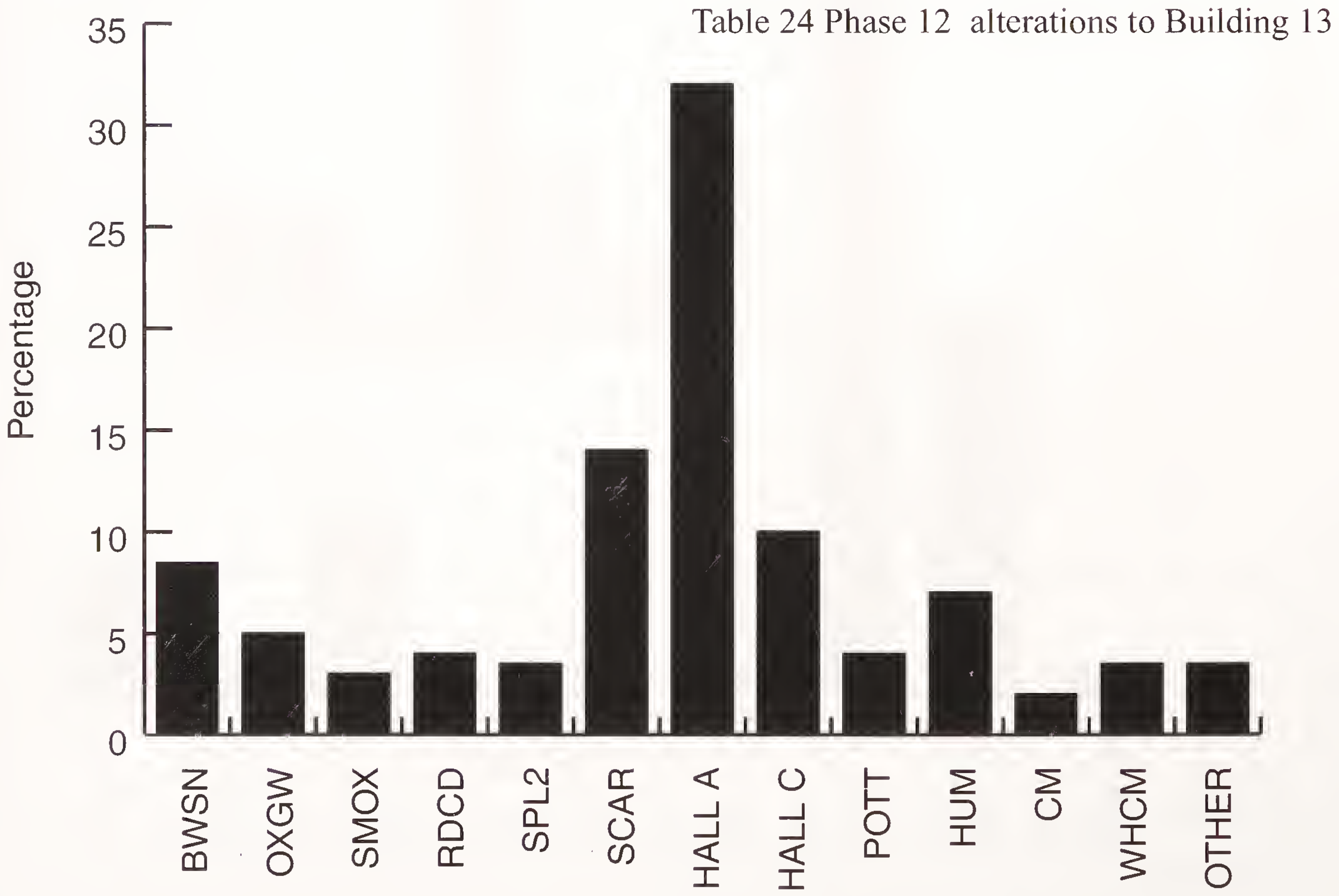


Table 24: Percentages by sherd count Phase 12, alterations to Building 13

Phase 12: further alterations to Building 13

The assemblage relating to further alterations to Building 13 shows a similar pattern, with just over 30% of being Hallgate A and 10% Hallgate C wares, and significant amounts of buff/white sandy ware and Scarborough wares. There is some residual material but other probably more contemporary wares include various coal measures and Humber wares. Other wares include small amounts of white gritty ware, oxidised sandy wares, Hallgate B and seconds or wasters as well as unclassified wares. The material from the yard area in Tenement Y (Table 25) reflects a similar pattern, with increasing quantities of white gritty ware.

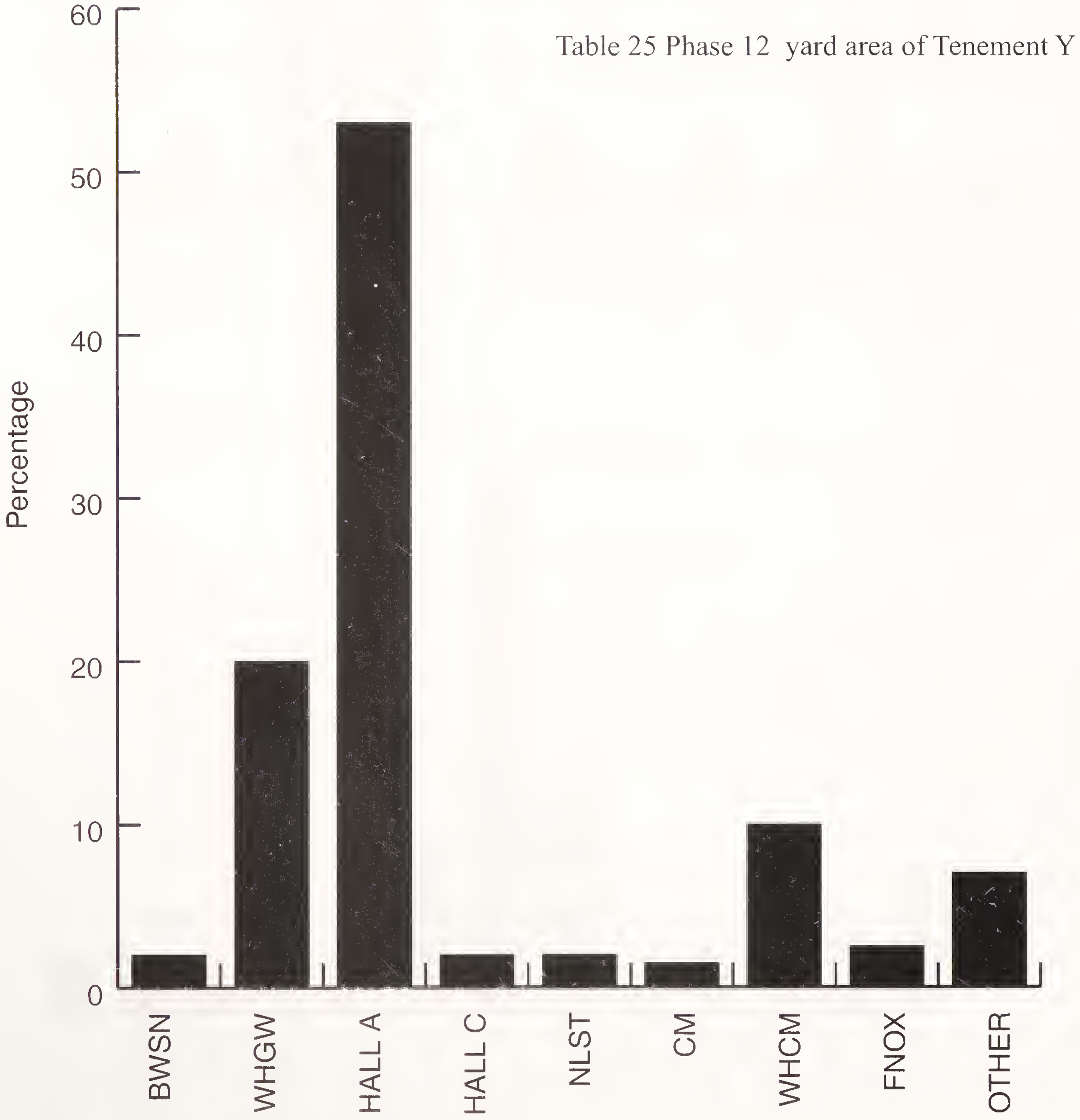


Table 25: Percentages by sherd count Phase 12, yard area of Tenement Y

Phase 13: further alterations to Building 13

The final stage of modifications to Building 13 (Table 26) provides the same picture, with Hallgate A wares dominating the assemblage (44%), though presumably this total includes a proportion of residual material by this stage. Foundation digging associated with the structural modifications and other earth moving activities might account for this. Hallgate C wares represent 10% of the assemblage and there are similar amounts of white coal measures material. Small amounts of buff/white sandy wares, white gritty ware, local early medieval shelly wares, unclassified wares and 'other' minor wares account for the rest.

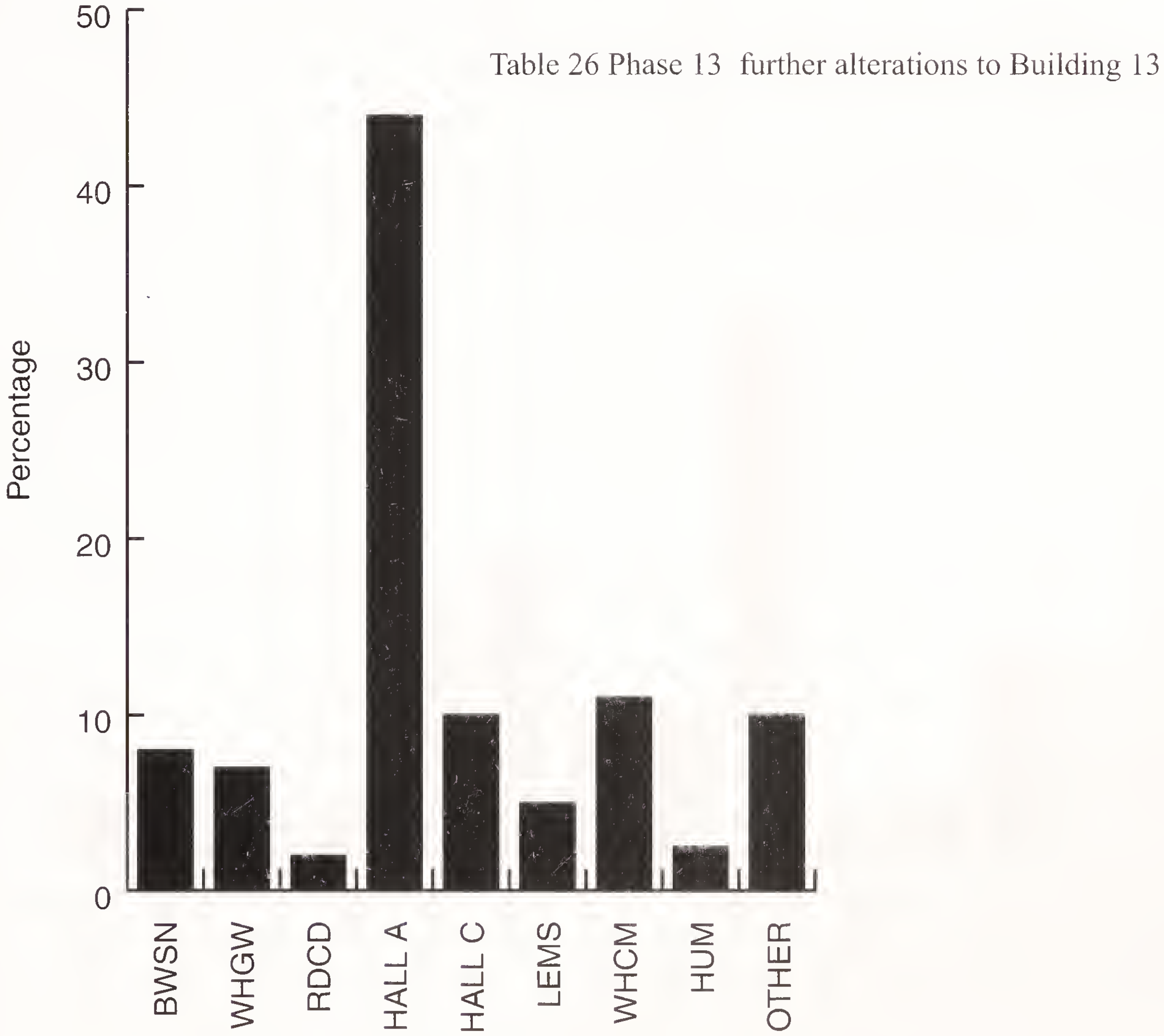


Table 26: Percentages by sherd count Phase 13, further alterations to Building 13

Phase 14: floods

There is no structural evidence relating to this phase, which is dominated by an extensive flood deposit dated to the end of the fouteenth or early fifteenth century. The pottery which relates to this episode is discussed in the section relating to site stratigraphy. The site-wide bar chart presented above (Table 7) shows that there is an increase in the amount of Humber ware, coal measures types and white gritty wares present in the dump deposits, as well as a proportion of residual material which must include Hallgate A wares, Scarborough wares and other minor types.

Phase 15, Building 16

Following this major flooding episode the composition of the pottery on Tenement Y shows a marked difference as the flood deposits largely seal earlier layers. For the first time the proportion of Hallgate A ware falls dramatically, and it is likely that much, if not all, of this is residual. Building 16 seems to date to the middle and late decades of the fifteenth century, by which time Hallgate production will have ceased; presumably foundation digging and disturbances have again incorporated earlier material into these layers. This is probably also true of the Hallgate C wares which account for 7.5% of the assemblage. The picture is now dominated by the white gritty wares which account for almost 30% of the assemblage, while coal measures pottery accounts for 16% and Humber wares another 15%. All other types are much less significant, accounting for 1–3.5%.

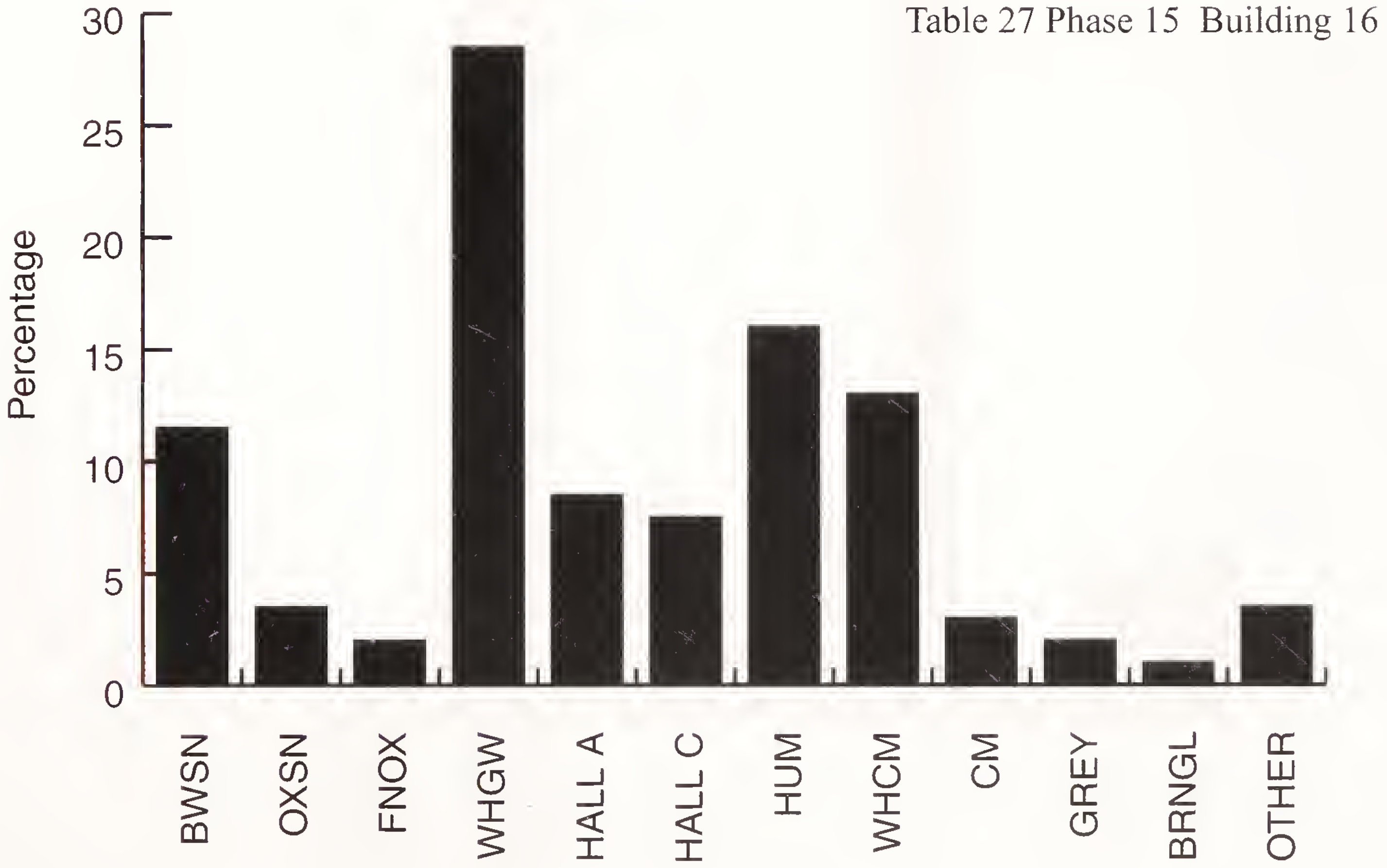


Table 27: Percentages by sherd count Phase 15, Building 16

Phase 16: modifications to Building 16

By this phase of occupation on the site the Hallgate wares have dropped to less than 1% (incorporated in the 'other' classification). The various types of coal measures wares, on the other hand, now account for over 40%, Humber ware a further 15% and the purple glazed wares a further 5%, with similar amounts of white gritty wares. Small numbers of Cistercian ware mugs indicate an early sixteenth-century date for the occupation of Building 16.

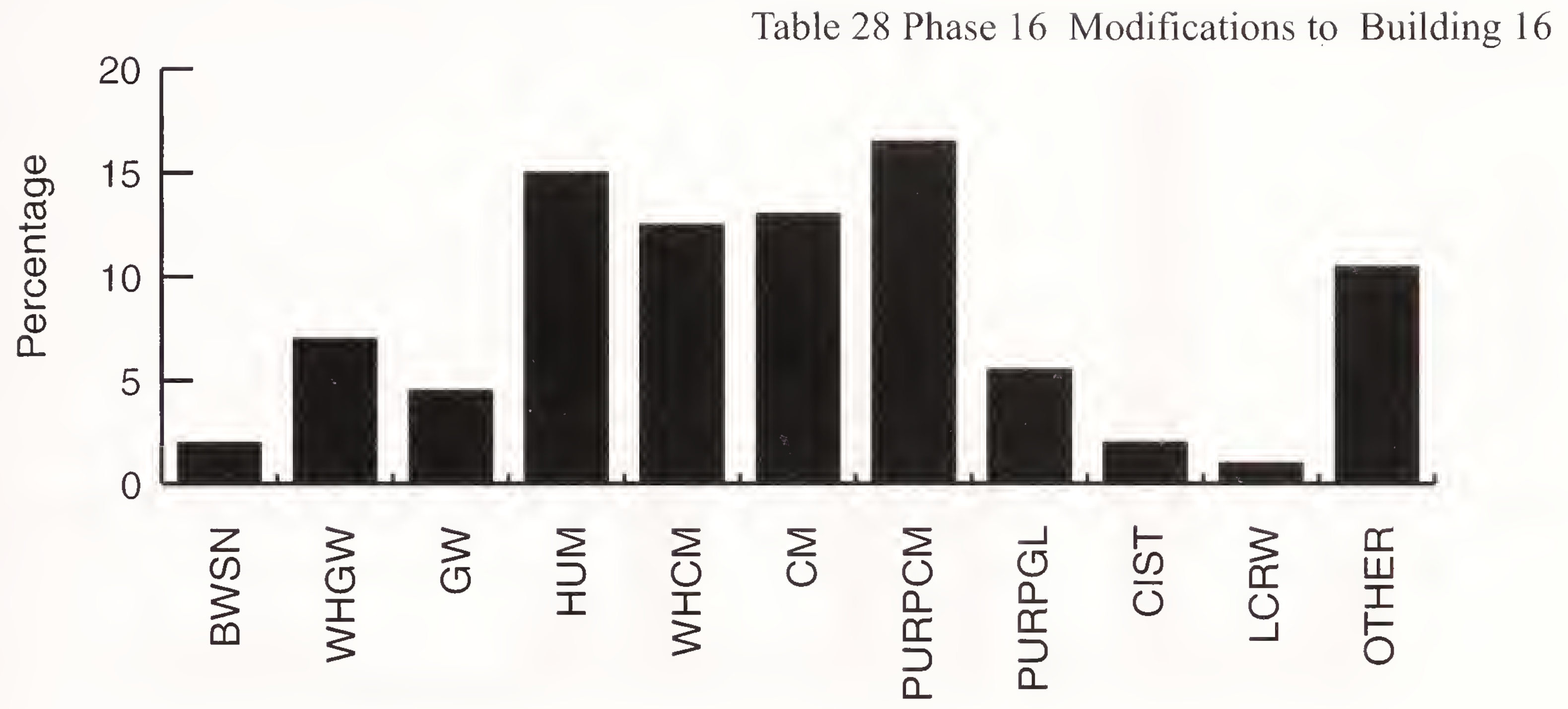


Table 28 Phase 16 Modifications to Building 16

Table 28: Percentages by sherd count Phase 16, modifications to Building 16

The coal measures products include open forms, two-handled cisterns, jugs and occasionally jars. The Humber wares include drinking jugs and larger jugs or cisterns.

Phase 17: further modifications to Building 16

During Phase 17 the rooms within Building 16 were modified to make some larger and others smaller. Environmental evidence suggests that there was little internal build up of material and that rooms were kept clean. This raises some questions about the provenance of the pottery assemblage presented in Table 29.

White coal measures and white gritty wares predominate, representing over 40% of the assemblage, with Humber wares and late medieval oxidised wares being the next most significant groups (over 30% in total). Other sandy wares and residual types account for the remaining wares.

Phases 18–20

Phase 18 seems to represent the abandonment of the late medieval buildings on site, and the obliteration of the tenement divisions between them. A clayey-silt deposit covered virtually the entire site, including Building 16 in Tenement X/Y. Pottery from a series of rubbly deposits which represent the collapse of Building 16 produced a similar range of pottery to that seen during its use, in which Humber wares and white gritty wares predominate. In the subsequent Phases 19 and 20 the old tenement boundaries had disappeared and the site was used mainly for horticultural purposes. Table 30 shows the types of pottery recovered from these phases.

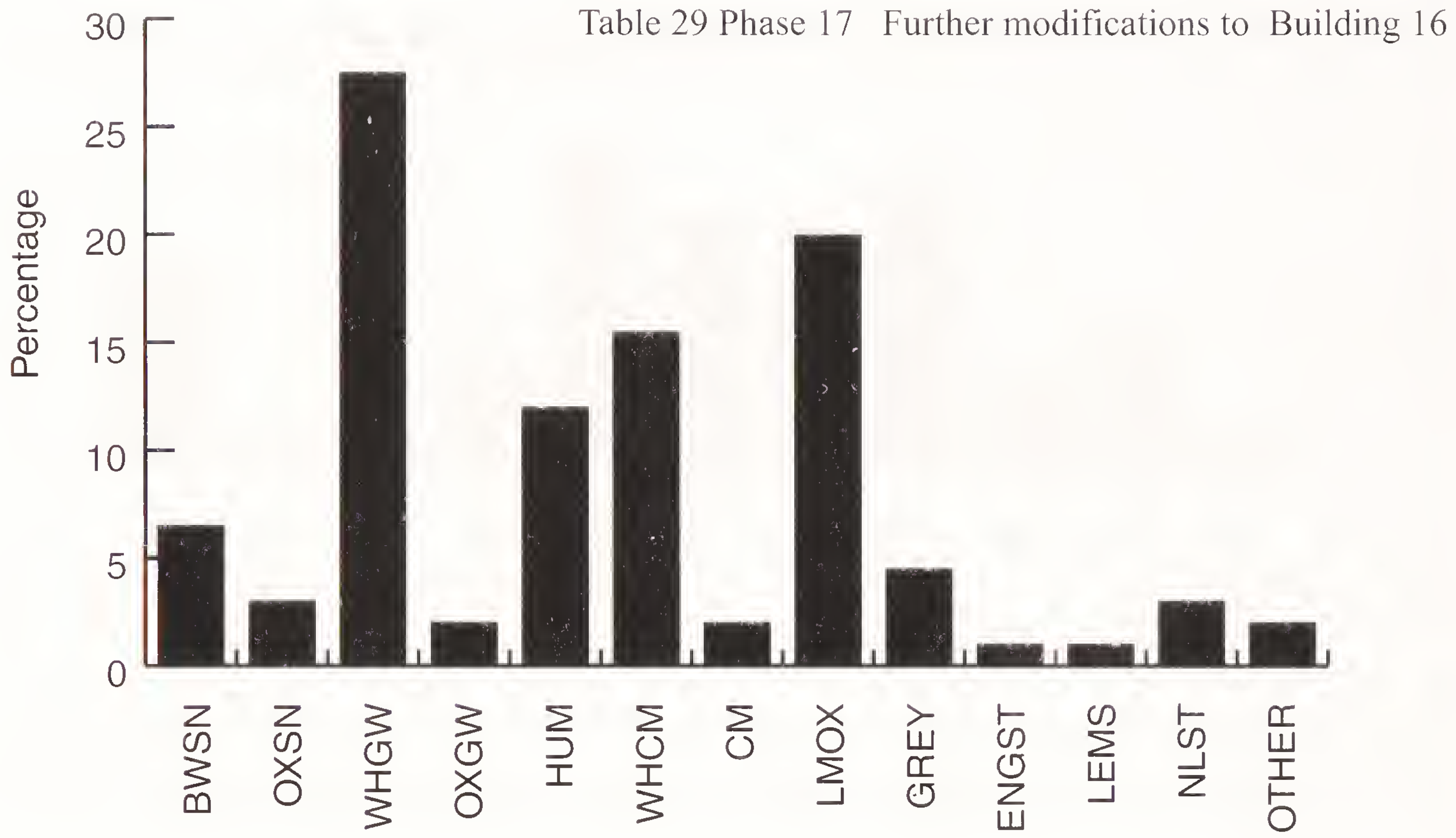


Table 29: Percentages by sherd count Phase 17, further modifications to Building 16

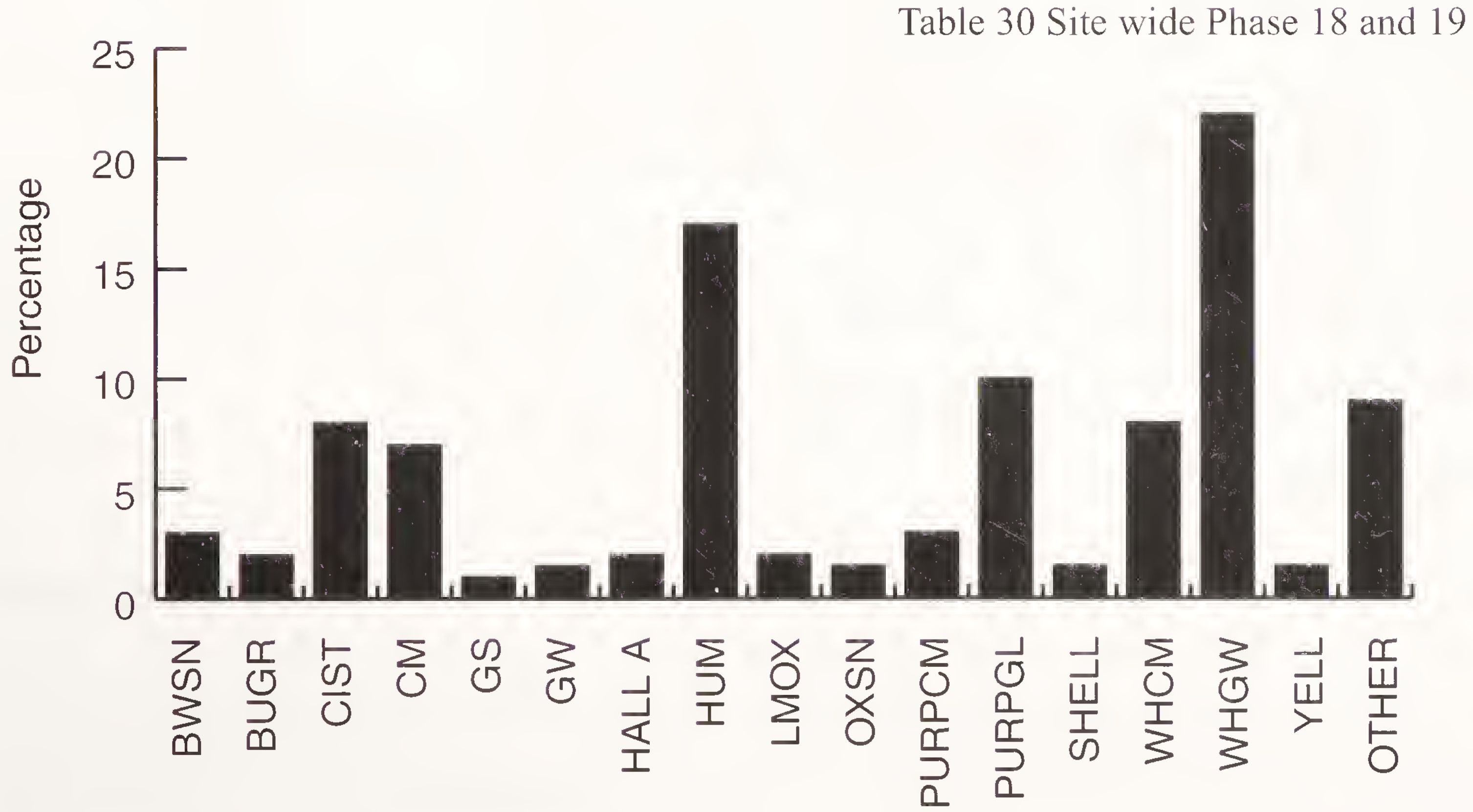


Table 30: Overall percentage by sherd count Phases 18 and 19

DISCUSSION OF FABRICS AND FORMS FROM LOW FISHER GATE

Reduced grey wares

Unglazed reduced sandy grey wares are a minor element throughout the Low Fisher Gate sequence. The assemblage includes examples of Torksey-type wares (Mainman 1990, 442–44), Grimston-Thetford, Thetford (Hurst 1976, 320), early medieval handmade wares (Young and Vince 2005, 121–22) and other minor types. Samples submitted for thin-section and ICPS analysis confirmed the presence of these types alongside a small number of examples of unclassified grey wares whose provenance is unknown (see below).

Early medieval handmade ware (EMHM)

Fabric

This ware includes several distinct fabrics and probably derives from a number of different sources. Examples at Low Fisher Gate are characterised by a fairly fine sandy fabric which is frequently reduced, though occasionally has an oxidised internal surface. Two main fabric types of early medieval handmade ware, A and B, were identified at Lincoln and might have a local origin. Another, fabric T, might be an East Anglian type (Young and Vince 2005, 121).

Form

The forms represented on Low Fisher Gate include handmade jars with long necks and globular bodies (Fig. 13, 3–4), possibly finished on a turntable as the

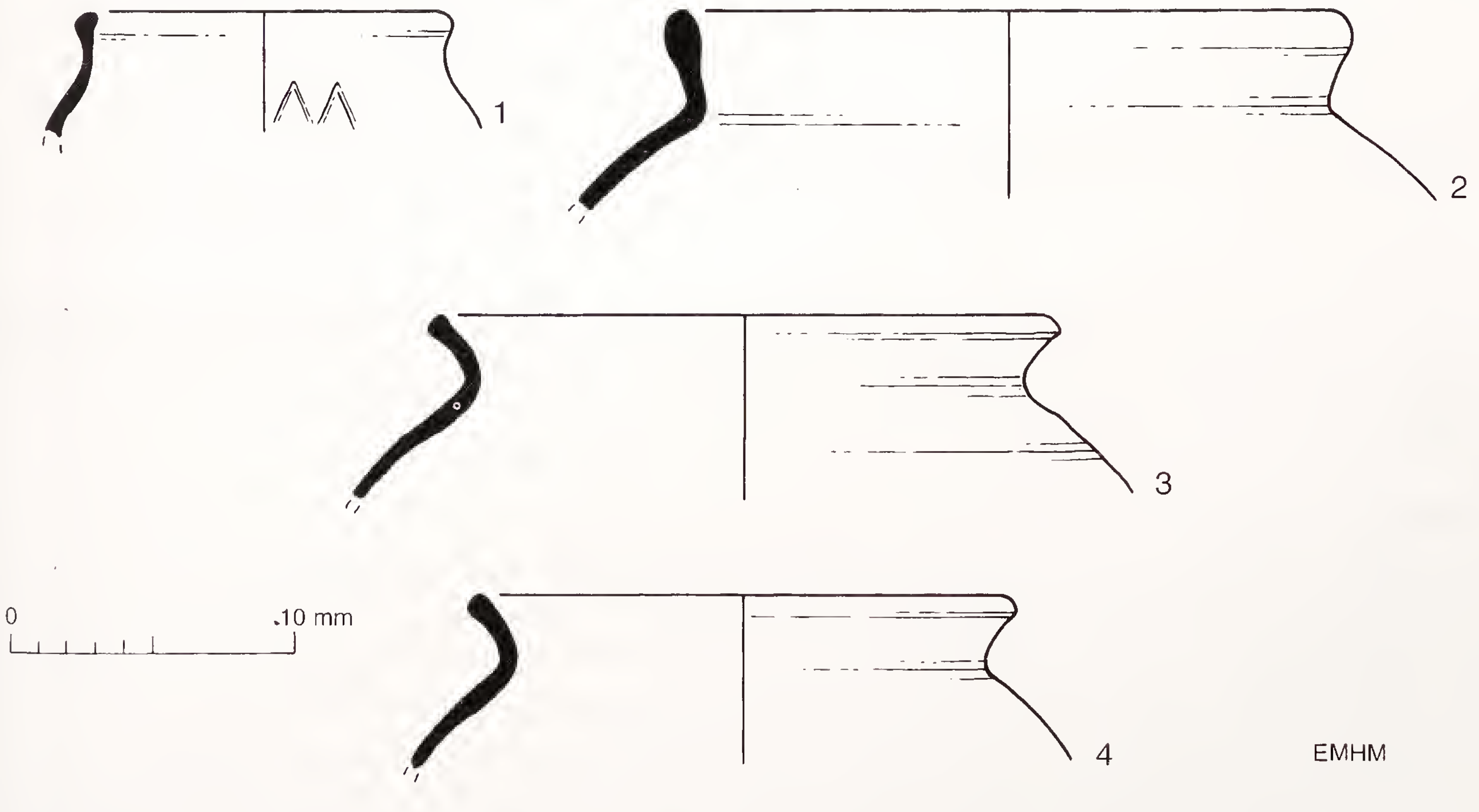


Fig. 13: Early handmade wares.

rims have some evidence of horizontal smoothing marks (Young and Vince 2005, 121). Rims may be simple and squared-off like those recovered from Lincoln (see Young and Vince 2005, 121, fig. 107, nos 785, 789 and 791) or slightly thickened and rounded (Fig. 13, 2).

Decoration

Vessels are usually plain, though they often have fine smoothed external surfaces. One vessel has lightly incised zig-zag lines running around the shoulder (Fig. 13, 1).

Source

As several types might be represented, a number of sources can be postulated which include both Lincolnshire and East Anglia. Thin-section analysis of similar material from Church Way, Doncaster has led Vince (2007a) to postulate that EMHM A might have come from Blackborough End, to the south-west of Pott Row (Vince 2007b). The sample selected for analysis from Low Fisher Gate was consistent with this EMHM A type and the same source has been suggested (Vince 2008). The sample contains abundant altered glauconite as well as a single rounded flint and clay pellets, while factor analysis of the ICPS data indicates that the Low Fisher Gate sample corresponds with two other EMHM A samples from Doncaster and one from Hartlepool (*ibid*).

Date

At Low Fisher Gate early medieval handmade wares are first recognised in Phase 3 (later twelfth century) and subsequently in Phases 7–9, where they might be redeposited (see below); this is consistent with findings from Lincoln where it occurs in late eleventh–mid-thirteenth-century deposits (Vince and Young 2005, 122).

Grimston-Thetford (GRIM-THET) ware

Fabric

This fabric type is a lighter grey, slightly hackly and more open fabric than EMHM and Torksey ware and has been described and discussed elsewhere (Hurst 1976, 320).

Forms

At Low Fisher Gate, Grimston-Thetford-type ware is represented mainly by a few jars and pitchers/storage jars, one of which has a squared off, thickened rim, not dissimilar to those of the buff gritty wares found in York, but with a slightly bifid outer edge (Fig. 14, 2). Several large sherds from the domed side of a mammiform-shaped, wheel-thrown costrel with thick walls recovered from mid-twelfth-century (Phase 2) deposits is relatively unusual (Fig. 14, 1). Similar forms have been noted in Lincoln (Jane Young, pers. comm.).

Decoration

These wares are mostly undecorated, though occasional sherds, probably from pitchers or storage jars, have applied wide thumbed strips.

Source

A sample submitted to determine whether it was an East Anglian Grimston-Thetford or Torksey-type product indicated that it was likely to be the former (Vince 2008, no. V4874).

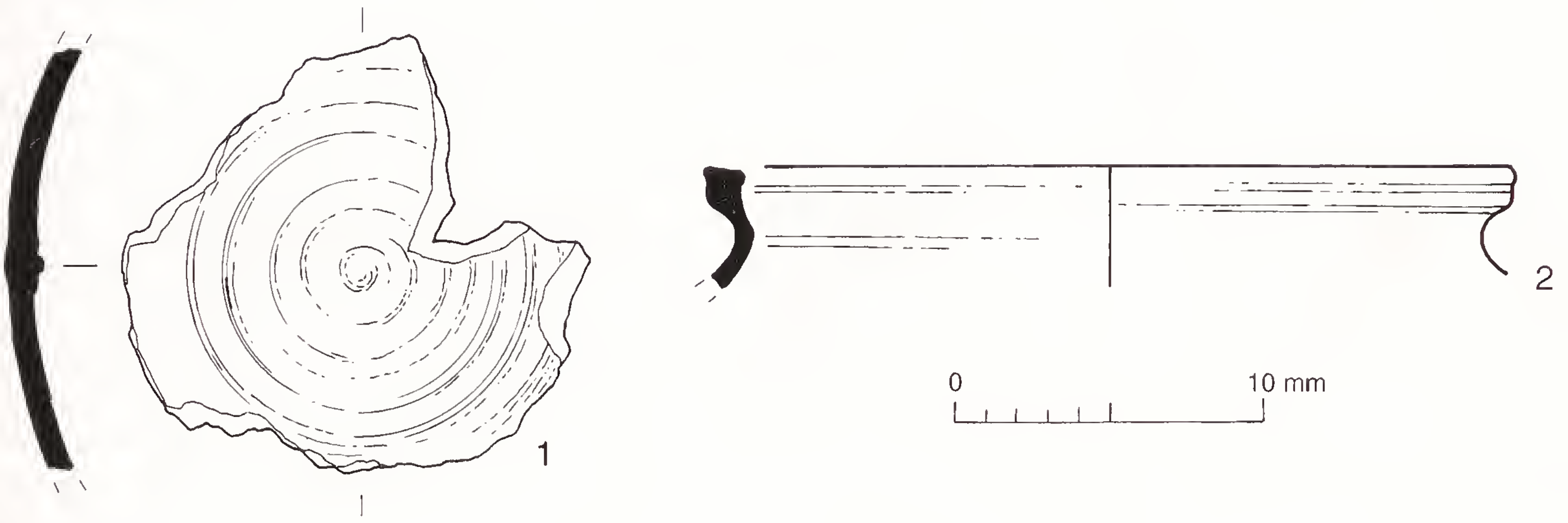


Fig 14: Grimston-Thetford-type ware

Shelly wares

Different types of shell-tempered wares were present as a minor element throughout the sequence. There were four main types which overlap chronologically, reflecting the changes in the organisation of pottery production and supply in the North Lincolnshire area. The code and descriptions below conform to those defined in the 'Corpus of Anglo-Saxon and Medieval pottery from Lincoln' (Young and Vince 2005) and this study provides helpful guidance as to the chronology and currency of these wares.

Lincoln fine-shelled ware (LFS)

Lincoln fine-shelled wares are the earliest shell-tempered wares to be identified and they account for almost half of the small assemblage (28 sherds) from Phase 2, the earliest pot-producing phase. They are believed to have been produced in the Lincoln area (Young and Vince 2005, 88) where they apparently evolve from earlier Middle Saxon shelly wares in the course of the tenth century. On the basis of form, none of the Doncaster examples from Phase 2, however, is likely to be as early as this (J. Young, pers. comm.) and a date in the mid-twelfth century has been suggested for their first occurrence. These wares peak in Phase 3 where they comprise just under 20% of the total, and decline steeply through Phases 4, 5 and 6, continuing in small amounts (less than 1%) for the remainder of the sequence where they occur residually. Their predominance in the early phases is consistent with the peak of this ware throughout the twelfth century (*ibid*, 88). Jars and bowls are the predominant forms (Fig. 15, 1–3).

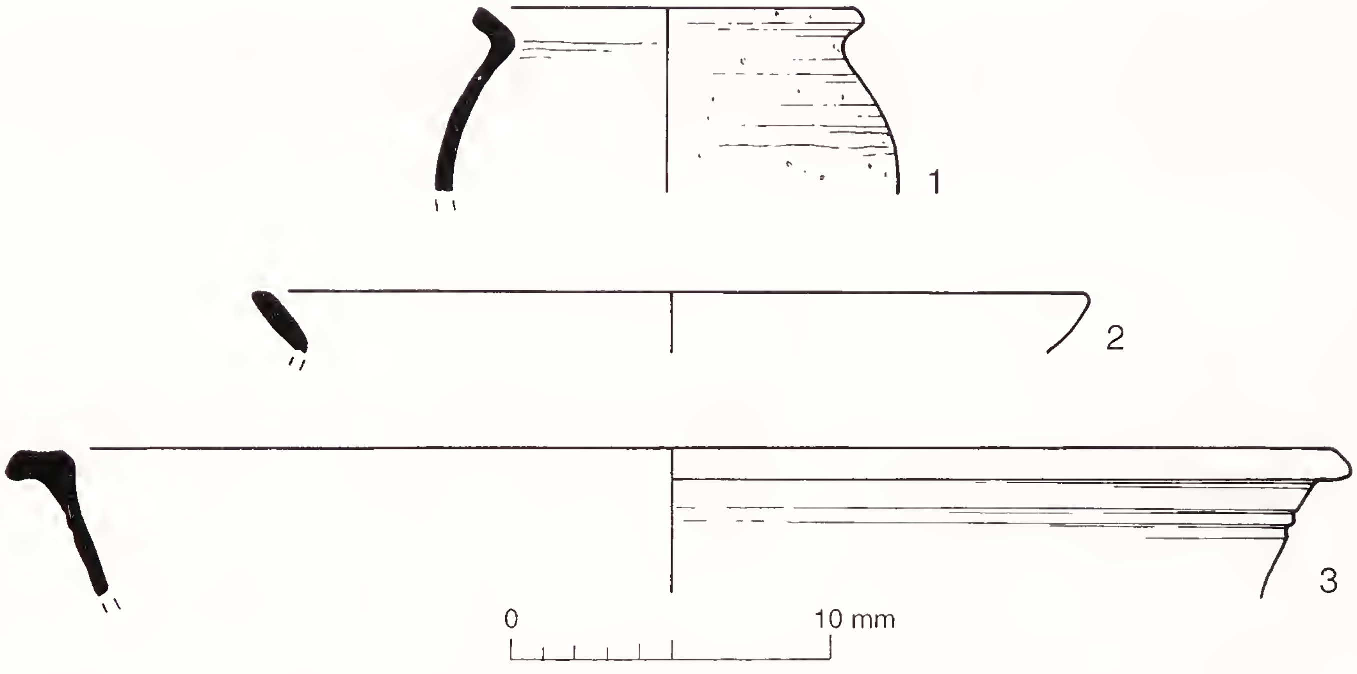


Fig. 15: Lincoln fine-shelled ware

Local early medieval shelly wares (LEMS)

The Lincoln fine-shelled wares overlap with local early medieval shelly wares which are also believed to be a local Lincoln product. They occur there in the early decades of the twelfth century and reach a peak at the beginning of the thirteenth century (Young and Vince 2005, 113). The majority of the examples found in Doncaster are of the main fabric type identified in Lincoln; jars (Fig. 16, 1) and wide-bottom cooking pots predominate. They are present at Low Fisher Gate from Phase 3 (later twelfth century) but rarely reach 5% of the total.

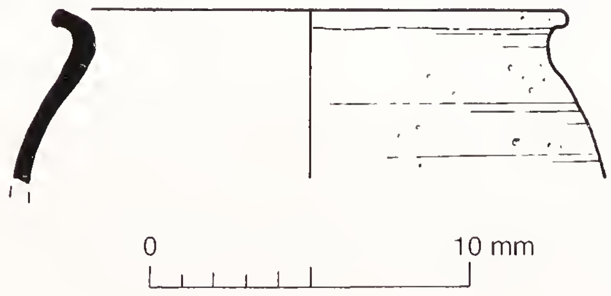


Fig. 16: Local early medieval shelly ware

North Lincolnshire shell-tempered ware (NLST)

The date range for these wares in Lincoln covers the period from c.1120–1400 (Young and Vince 2005, 275). At Low Fisher Gate jars and bowls in this fabric first appear in Phase 6 (later thirteenth century), they peak at around 10% of the total assemblage in Phase 9 (mid-fourteenth century) and then decline sharply beyond that date, when they are likely to be residual. Large bowls and jars are the typical forms (Fig. 17, 1–8).

Potterhanworth-type ware (POTT)

The chronology of these later shelly wares in Lincoln is from the early/mid-thirteenth century to the late fifteenth century (Young and Vince 2005, 275). This

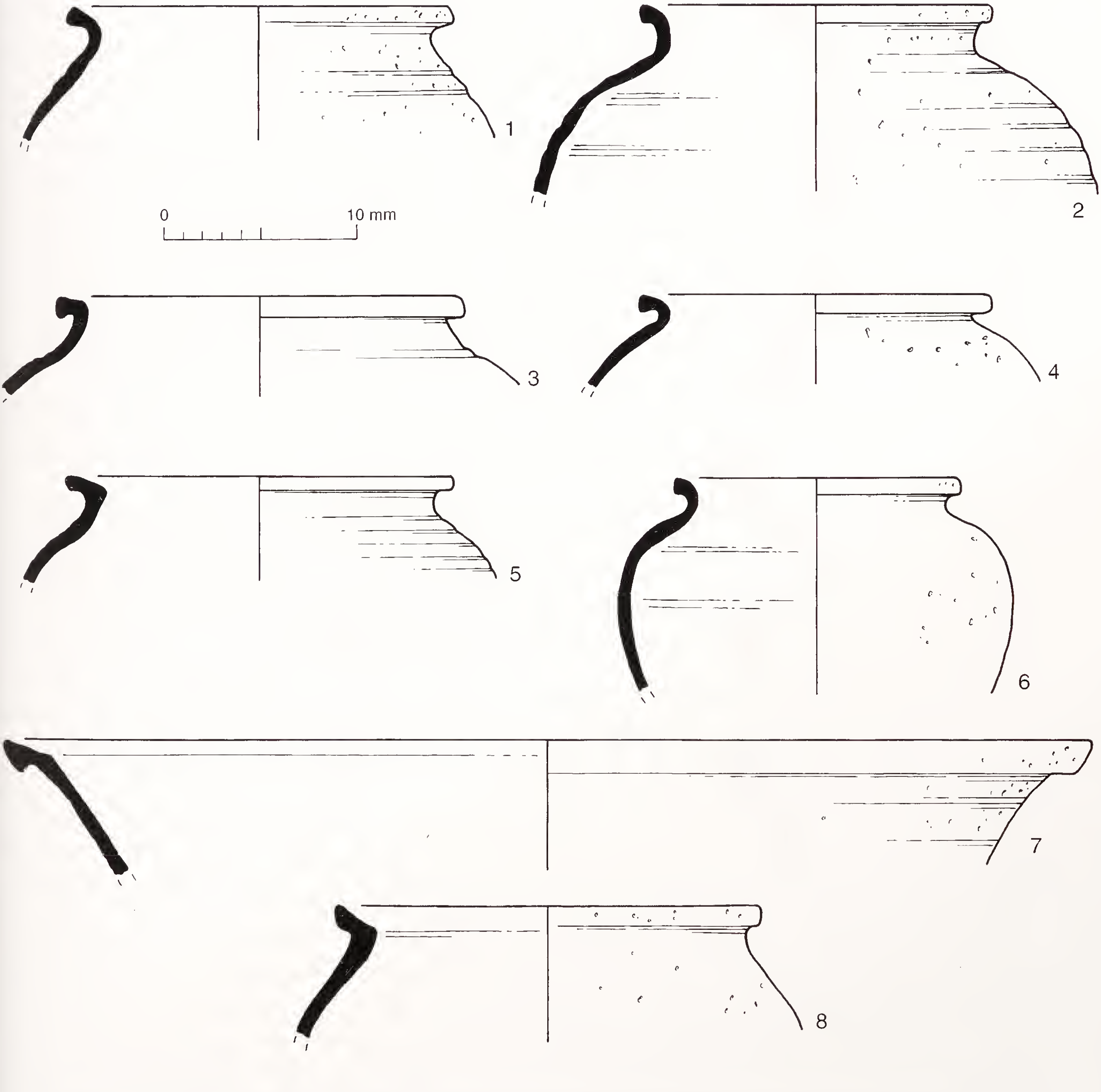


Fig. 17: North Lincolnshire shell-tempered ware

dating is consistent with their first occurrence at Low Fisher Gate in Phase 9, when they appear at the same time as the peak in North Lincolnshire shell-tempered wares. The modest peak of the Potterhanworth wares is in Phase 10, when they approach 5% of the total, represented mostly by bowls and jars (Fig. 18, 1–4). After this, numbers decline sharply, appearing only residually in later contexts.

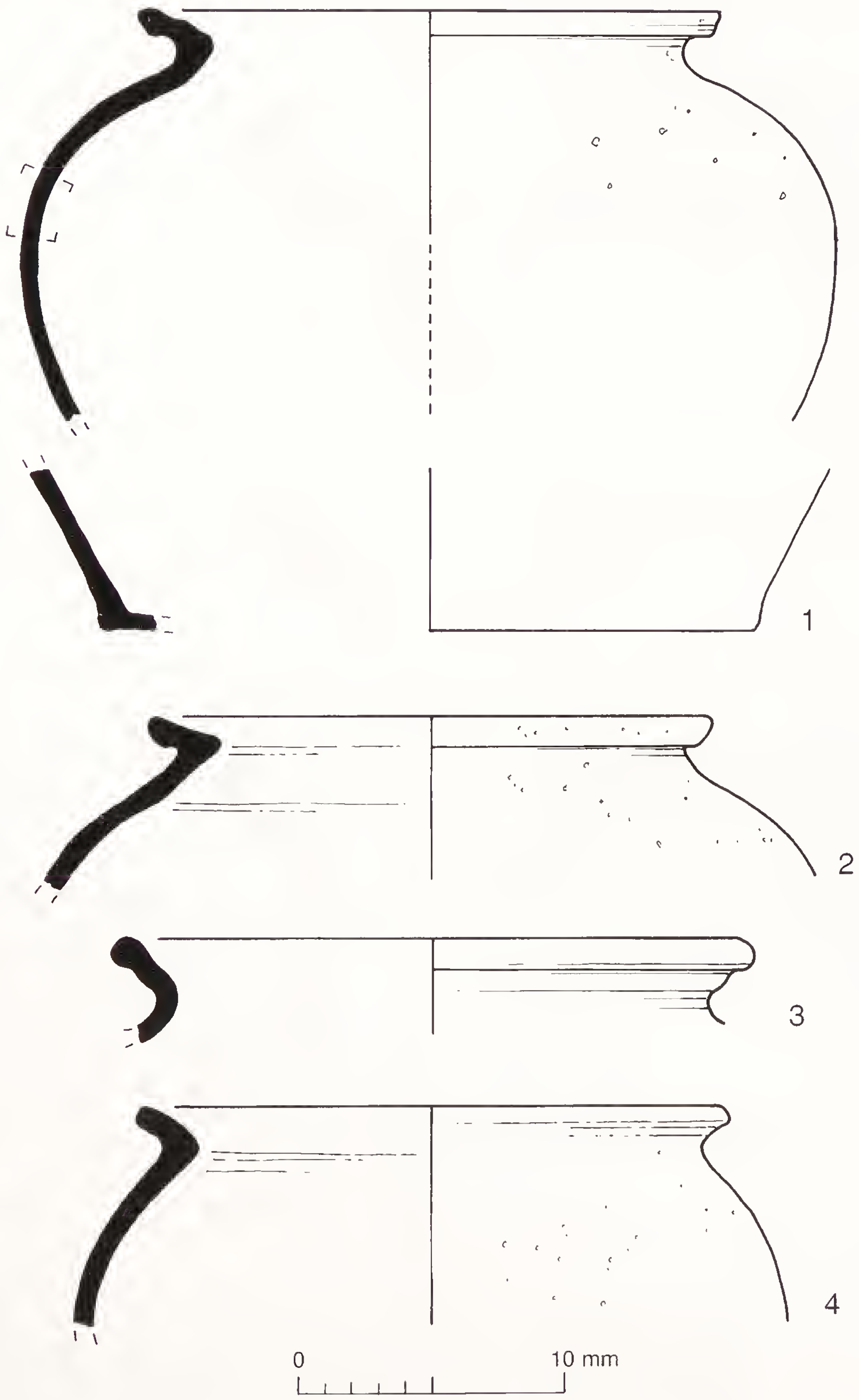


Fig. 18: Potterhanworth-type shelly ware

Stamford and early glazed wares (STUNGL, STGL, STAM, DEVSTAM, EGW)

Stamford products including unglazed, glazed and the later so-called developed Stamford wares (Kilmurry 1980) were recovered in small amounts. Both unglazed and glazed Stamford ware sooted jars and pitcher fragments appear in early/mid-twelfth-century deposits (Phase 2) and continue to be present in the later twelfth century (Phase 3), after which they disappear.

A small sherd of what might be a type of early glazed ware (EG1) found in York (Mainman 1990, 445) and occasionally in Lincoln (Young and Vince 2008, 75) was found in these early Phase 3 deposits. This pale grey/white fabric might be confused with either Stamford ware or the Hallgate B/splashed ware type 4, which also has a light, whitish-firing body and light yellow/olive splashed glaze. The sherd was too small for its form to be determined.

Developed Stamford ware, a fine white-firing clay fabric with a dark green, copper-coloured glaze occurred as pitchers and/or jugs. Sherds were recovered from deposits dated to the twelfth century (Phase 3). It decreases from Phase 7 (the late thirteenth/early fourteenth century) onwards, after which it is likely to be residual. Pitcher/jugs are frequently decorated with thin combed or stabbed thumbed strips from their inception in the late twelfth century (Phase 3) through to the beginning of their demise in the early fourteenth century (Phase 7).

Gritty ware

Several categories of gritty ware were recorded and these form a consistent element of the assemblage, with fluctuating significance through the sequence. Variations include unglazed and sparsely glazed examples in oxidised, reduced, buff- and white-firing fabrics, and there is some chronological patterning to their proportions. Sometimes the distinction might relate only to firing differences within one production centre, while in others distinct industries with different provenances probably account for the variations. Jar and bowl forms predominate, with pitchers, lamps and other forms being only secondary products.

This proliferation of gritty wares in the eleventh–thirteenth centuries is a well-established phenomenon as small industries are set up to serve both urban and rural communities. This is the case in North Yorkshire in both York (Brooks 1987, 150; Mainman 1990, 485–86) and Ripon where studies have shown a wide range of concurrent industries. The same is true in South Yorkshire where a broadly defined group, South Yorkshire gritty ware, is evident not only at Doncaster but also at 16–20 Church Street, Bawtry (Cumberpatch 1996, 60). The pattern seems to be that the production of gritty wares, together with the splashed wares described below, having become established in the twelfth century then declines as major industries dominate the available markets; Doncaster seems to follow this pattern.

Buff gritty ware (BUGR)

Fabric

This is a hard-fired buff-coloured fabric with subangular grits frequently breaking through the surface, and occasionally it has very small amounts of rounded red iron ore which can make the vessel appear to be intentionally oxidised.

Form

Jars, often high shouldered, with short necks and thickened, squared off slightly overhanging or more rounded rims (Fig. 19, 1–2) are typical, although bowls with similar rims also occur (Fig. 19, 3).

Date

On Low Fisher Gate the earliest examples are in Phase 3, around the second half of the twelfth century. The ware reaches a peak in Phase 4, where it accounts for between 5% and 7% of the assemblage in the late twelfth/early thirteenth century and then declines. The small amounts seen through the rest of the sequence are probably residual although there is a second peak in a closely related fabric in Phase 11 (see below).

Source

Buff-coloured gritty wares are widespread in the late twelfth and early/mid-thirteenth centuries and the quantity recovered is consistent with the existence of many local production centres. Previous work suggests one possible source as Potterton in West Yorkshire (Vince 2007b).

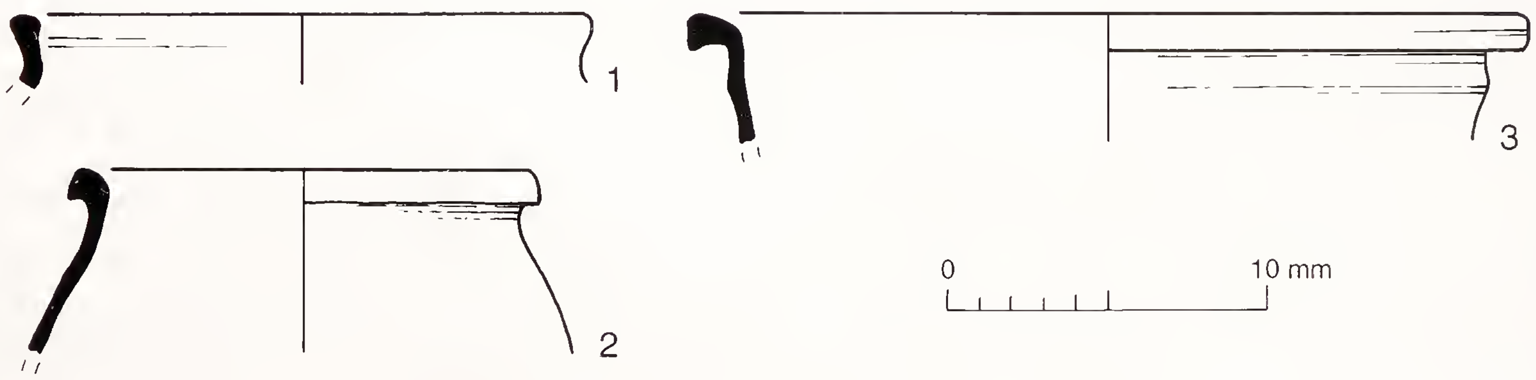


Fig. 19: Buff gritty ware

White gritty ware (WHGW)

A white gritty ware was distinguished from the buff-coloured gritty wares. There seem to be two distinct phases when these wares were produced, one early in the sequence (Phases 4 and 5) when there is the possibility of confusion between the white and buff gritty wares. In later levels (Phases 12 and 13) the amount of white gritty ware increases, again in parallel with the main white coal measure ware

(WHCM), and both appear to be part of a suite of closely related fabrics, as borne out by analysis undertaken on samples from the site.

Fabric

There is variation in this broadly defined group but characteristically the clay is well mixed with abundant subangular quartz sand and moderate small black inclusions which thin section (Vince 2008) has shown to be clay/iron pellets typical of some of the Doncaster products such as the Market Place wasters (Hayfield 1984). Other fairly sparse inclusions comprise iron pyrites or the rusty rims of voids. Surfaces are white but the cores can be reduced to a light grey colour.

Forms

Forms vary over time, with pitchers and shouldered jars giving way to bowls and jugs after the mid/late thirteenth century. However, there are examples of jars (Fig. 20, 1–2) in later levels which could be residual or part of the white ware tradition. Jugs or pitchers with strap handles are not common. One example has two applied twisted and slightly flattened strands down the middle of the upper surface. Thin-walled jars usually have short everted necks, rims which are thickened, squared off or form a small flange which widens towards the edge.

Date

The first occurrence of a pitcher/jug with strap handle and applied twisted decoration is in the late twelfth to early/mid-thirteenth century (see Fig. 29, 8), in a fabric similar to a Hallgate B fabric, although there are occasional sherds in earlier deposits.

Source

There are clearly a number of sources for these white gritty wares and the problems of visually characterising and distinguishing the variations has been alluded to. Three samples were submitted for analysis and while two were likely to be Doncaster products on the basis of the thin-section and ICPS results, one was identified as a type common in York which, it has been argued, might derive from Potterton, West Yorkshire (Vince 2007a; Vince 2008). The same source was postulated for this type at Hallgate 95 (Cumberpatch *et al* 1998–99, 52). The analysis of the other two samples, however, shows common features with both the white wares produced at Hallgate and white wares from Firsby and Rawmarsh. It is likely that at least some of the Low Fisher Gate examples were made from the same clays as the Hallgate B wares.

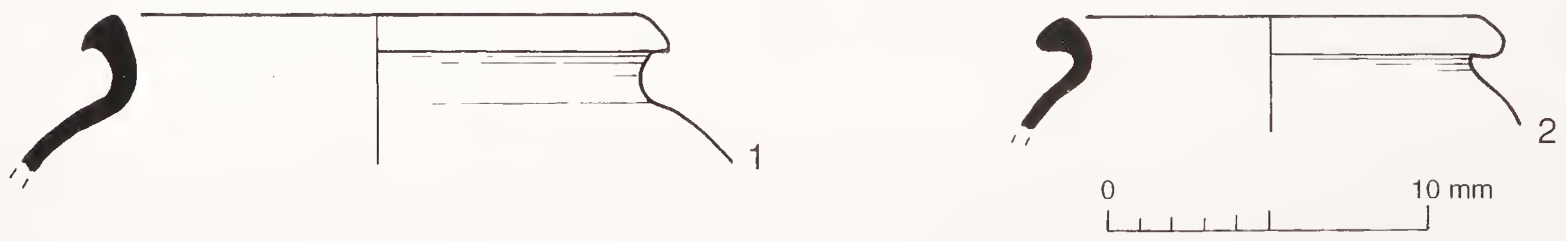


Fig. 20: White gritty ware

Oxidised gritty ware (OXGW)

Fabric

These are typically hard unglazed wares with a very hackly break and fairly smooth surface texture, and they are oxidised throughout. Sherds are densely packed with moderate opaque, white, rounded quartz grains, subrounded black iron ore and flat shale-like inclusions.

Form

Jars with rounded bodies and flanged rims are typical.

Date

The type first occurs in late twelfth-century contexts (Phase 3) but it is always a minor ware.

Source

Visually the fabric resembles that of Hallgate C and may be an unglazed variant. A similar oxidised gritty ware was recognised (part of group D) at Church Street, Bawtry (Cumberpatch 1996, 61). A single sample from Low Fisher Gate was submitted for analysis and the groundmass of clay and inclusions observed is consistent with a source in East Yorkshire.

Reduced gritty ware (RDGW)

Fabric

A group of reduced fabrics comprises two main types, both of which are very similar in texture to buff gritty ware but have a finer matrix and rounded milky quartz sand grains. It is typically hard and fairly highly fired with grits poking through the surface. Occasional sherds have an oxidised sandy surface and reduced gritty core, reminiscent of Beverley wares (see below).

Form

Jars or cooking pots, often with wide ribbed walls, predominate. One example has an everted flanged rim and globular body and a thin strip of splashed glaze running vertically along the neck, raising the possibility that there might be some overlap with splashed glazed wares, perhaps of early Hallgate C type. This vessel has a curious pattern of sooting, the darkest band being along the inner two-thirds of the top of the flanged rim together with a very thin strip of sooting along the outer rim edge and patches on the shoulder.

Date

The continuing, if erratic, presence of this type from Phase 3 through to Phase 15 suggests that this broad group encompasses a number of minor variations. Sherds in later phases are likely to be residual.

Splashed wares

Pottery with a splashed rather than a suspension glaze is a well-known phenomenon in northern England from the later eleventh century onwards and the Doncaster assemblage is no exception. A wide variety of fabrics was recognised in the initial sort but further consideration, supported by thin-section analysis and ICPS analysis, resulted in the reduction of this number and the amalgamation of some of the types.

The original eight types were regrouped into four main types which include:

A. Splashed ware type 1 (which incorporates the original types 1, 3, 6, 7 and 8 in the archive report) is now believed to be part of the Hallgate A group. In addition there is a category referred to in the archive as splashed 1/Hallgate A which includes sherds with a splashed glaze on an otherwise Hallgate A-type fabric.

B. Splashed ware type 2 remained in its original category and appears to have a South Yorkshire-type clay matrix with the addition of limestone temper.

C. Splashed ware type 4 appears to be a splashed ware precursor of Hallgate B.

D. Splashed ware type 5 is a Beverley-type splashed ware.

Group A: splashed ware type 1

Fabric

This is a fine, fairly hard, oxidised ware with few inclusions and is distinguished only on these grounds from splashed ware 1/Hallgate A.

Forms

Forms include fine-walled pitchers and jars. A body sherd with an applied thumbed strip, perhaps from a jar, first occurs in the late twelfth century (Phase 3). Strap handles attached to the rims of pitchers, thought to be an early splashed glazed form from the mid-twelfth century onwards, first occur during this phase of activity and are still seen in the late twelfth/early thirteenth century (Phase 5) (Fig. 21, 5).

Date

Splashed ware type 1 is the earliest of the splashed ware types, occurring first in the mid/late twelfth century (Phase 3) when it is found in the greatest quantities. A small amount continues through Phase 4 but by Phase 5 it has presumably been incorporated into the splashed 1/Hallgate A category described below.

Group A: splashed ware type 1/Hallgate A

Fabric

This is a very similar fine oxidised fabric with a light to mid, occasionally dark, grey reduced core. The matrix contains moderate to abundant fine sand, moderate rounded black iron, sparse to moderate small whitish particles, perhaps limestone or grog, which vary in size from 0.25 to 2mm, and sparse to moderate mica. It is typically coarser than the fully developed Hallgate A ware. The glaze is usually a light to mid-olive green with yellowish or chestnut brown edges and occasional brown flecks. It is the character of the patchy and pitted splashed glaze which helps to distinguish it from the fully developed Hallgate A ware with suspension glaze.

Forms

Again pitchers predominate from an early stage (Phase 3), including those with pinched lips and wheel-thrown strap handles attached to the rim; there are several

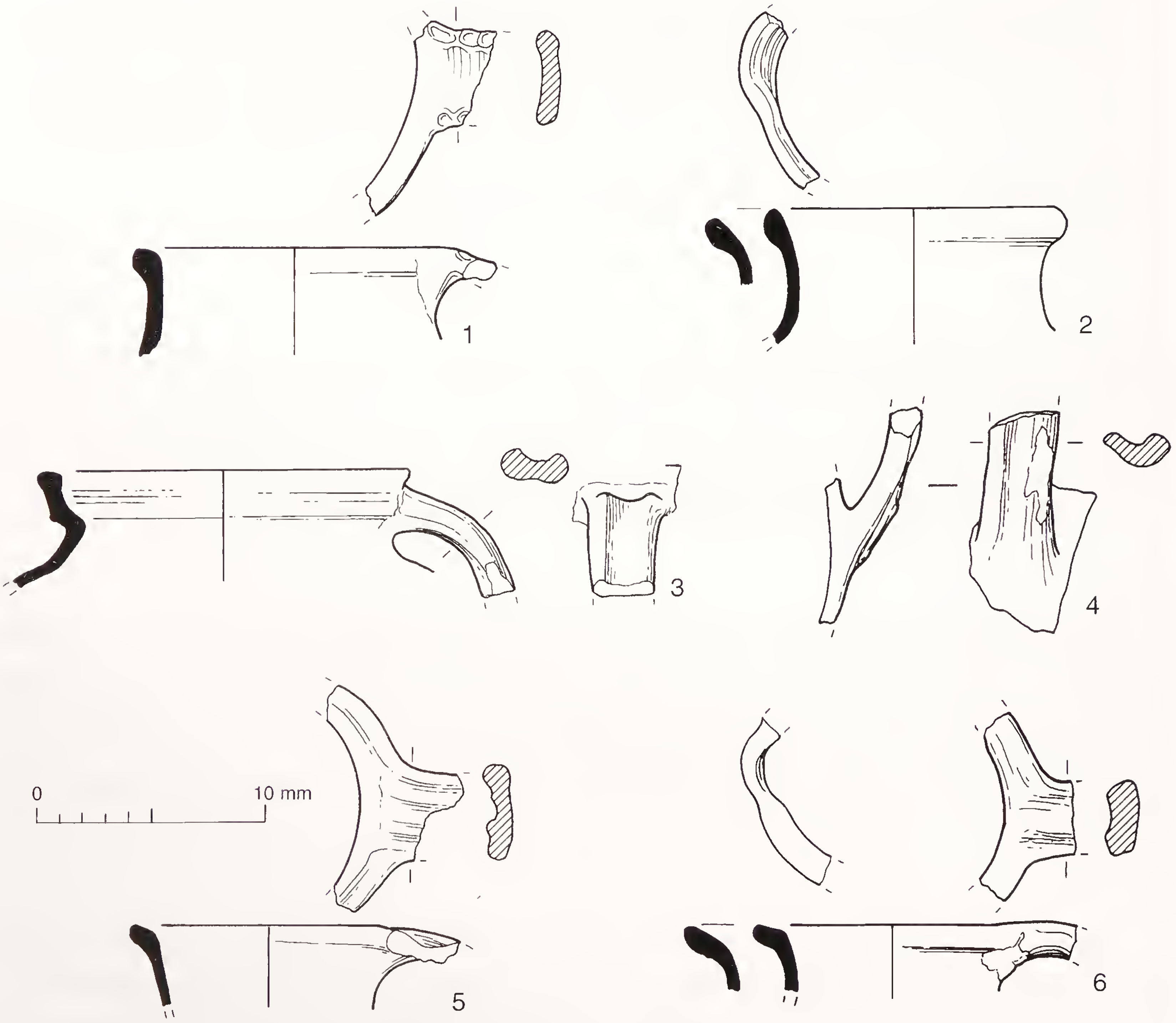


Fig. 21: Splashed ware type 1/Hallgate A type

examples from the mid/late twelfth century onwards. Vessels are typically wide-mouthed, and rims can be collared with a slight rounded rib at top and bottom (Fig. 21, 3), everted and rounded (Fig. 21, 2), or with a small flanged rim with handle attached to the rim (Fig. 21, 1 and 6). A small pulled or pinched lip is typical (Fig 21, 2 and 6). Over time necks become narrower and the jug form evolves (Fig.22, 2–4). In some cases an incised horizontal line occurs approximately 10mm below the rim which may be decorative or may result from the production process. Handles are often irregularly shaped (Fig. 21, 4) and include hand-pulled examples. Decoration is rare but occurs in the form of an applied curved strip on an example with a splashed glaze and a Hallgate A fabric (Fig. 22, 1). The typical thin walls and horizontal surface markings might suggest the use of a turntable or a wheel; there was little evidence of coiling.

Date

From a first occurrence in the mid/late twelfth century (Phase 3) these peak in the mid-thirteenth century (Phase 5). After this (Phases 6–9) they may all be residual as the main Hallgate A production evolves and dominates.

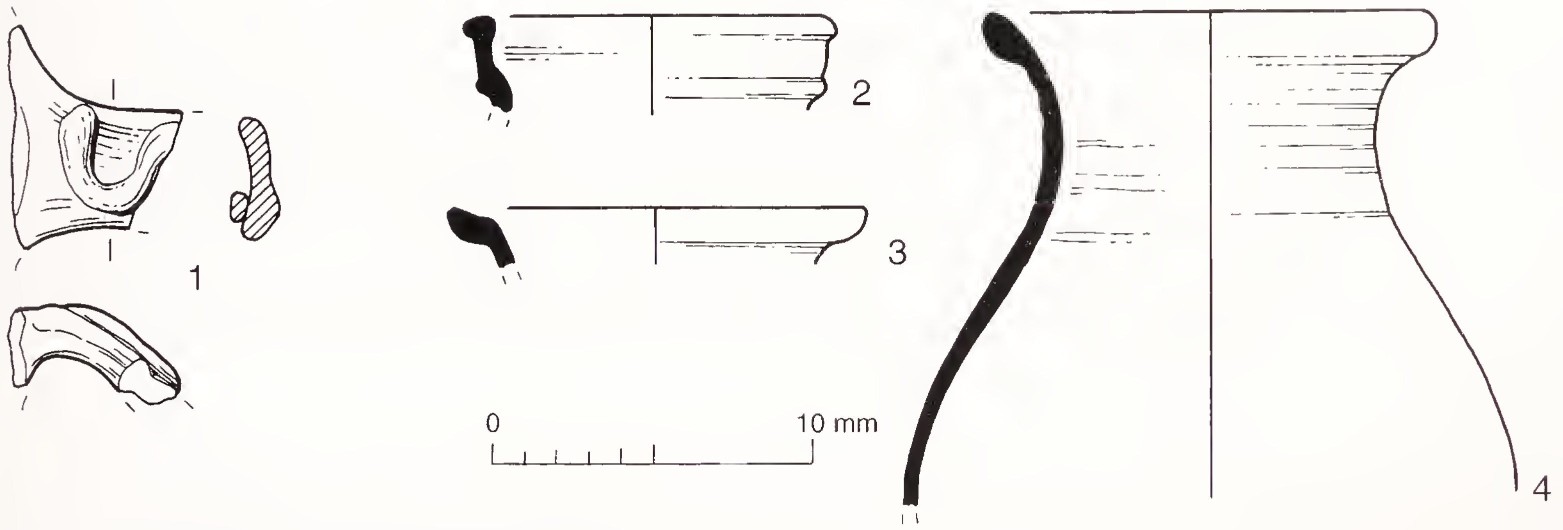


Fig. 22: Splashed ware type 1/Hallgate A type

Group A: splashed wares 3, 6, 7 and 8

These types are relatively uncommon and have been amalgamated with the other Group A Hallgate A wares. Typically they are first recovered in the Phase 3 deposits (mid/late twelfth century onwards) and pitchers or bowls are the typical forms.

Splashed ware 3 was initially distinguished by its very fine fabric which has a mid-olive green glaze, occasionally quite thick and lustrous in patches. An unusual pitcher rim with applied thumbed decoration on the inside was placed in this class.

Splashed ware 6 was distinguished by a slightly sandier fabric and is low-fired. Typically it has thick buff to light brown margins and surfaces, and a light grey core with occasional large rounded haematite, together with more abundant smaller iron particles.

Splashed ware 7 is a sandier variant with sparse muscovite inclusions. Very few sherds were placed in this category, which occurred from Phase 4 onwards, and no forms could be recognised.

Splashed ware 8 is again a fine variation of Hallgate A/splashed 1-type fabric and includes both pitchers and bowls which occur in small quantities from Phase 4 onwards.

Discussion

The Group A types of splashed wares are closely related and it became apparent that attempts to divide them were not helpful as types blended into each other and distinctions were quite subjective. They occur first in the early phases (Phases 3 and 4) and in lesser quantities after that.

Seven samples were sent for thin-section analysis and ICPS, including examples classed as Hallgate A and splashed ware 1. In thin-section it was noted that although there are slight differences in the character of the sand inclusions and differences in the clay matrix, all are likely to be Doncaster products. The analysis on the ICPS data suggested that the splash-glazed wares were made from different clays to those used at Hallgate and this might support the idea of 'a third Doncaster industry, pre-dating Hallgate and either contemporary with or later than the Market Place production' (Vince 2008).

Such an interpretation is consistent with the dating of the site and the typological development of the pitcher forms described above. Occurrences of these forms in thirteenth-century levels must include some redeposited material but might also suggest some continuity of production alongside the developing Hallgate A production. As that industry settled down into mainstream production, these earlier splashed wares become less obvious and less visible in the assemblage.

Group B: splashed ware type 2

This minor splashed ware type remained distinct from the Hallgate products although a South Yorkshire origin is considered likely.

Fabric

These have a similar but grittier fabric than the splashed ware Group A. They are hard with oxidised surfaces and margins, and a light grey reduced core. The surface texture is more pimply and contains quartz sand and iron ore, together with moderate to abundant fine white mica and occasional white limestone inclusions.

Form

Forms include pitchers with wide everted rims from Phase 3 onwards and a possible tubular spout or narrow bottle rim in a slightly grittier fabric with a simple, slightly everted and rounded-off shape.

Date

The first pitcher rim appears in Phase 3 and the ware continues in small quatities throughout the late thirteenth century (Phases 5 and 6), after which it is likely that sherds are residual.

Group C: splashed ware type 4

Hallgate B wares, in a similar way to the Hallgate A wares, might have emerged from an earlier splashed ware type. Splashed ware type 4 has a hard gritty fabric not unlike splashed ware type 2 and a similar white or slightly oxidised surface, a pale grey core and a whitish-buff internal surface. Unglazed surfaces have abundant fine pimples where sand grains have erupted through the surface.

Date

Like the other splashed wares these make their first occurrence in the second half of the twelfth century (Phase 3) and continue to play a minor role through subsequent phases but are likely to be residual after Phase 6.

Form

Once again pitcher forms predominate and there are occasional jars.

Discussion

This is a minor ware at Low Fisher Gate and is probably synonymous with white-firing splashed wares recognised previously as a fairly minor group restricted to the mid-twelfth century (Alvey 1989, 368).

Group D: splashed ware type 5

Fabric

A Beverley-type splashed ware with lightly oxidised surfaces and margins and a dark grey core was recovered in very small quantities. It is characterised by hard firing and the glaze is often patchy and degraded. Iron/haematite inclusions are similar to Hallgate C wares.

Form

A pitcher form with a simple rounded collar rim was recognised in this ware.

Date

This is a relatively rare splashed ware type and is perhaps residual by the mid-thirteenth century (Phase 5), when continuing examples are somewhat abraded.

The wide variety of splashed and gritty wares of the twelfth and early thirteenth century show that potters were utilising the local clays from an early period and that the Hallgate industries have their roots in the middle decades of the twelfth century if not earlier. The range of closely related wares suggests that production was probably diffuse, with slightly different types being produced by different potters or small potteries using different clay deposits. The developments in form in all these wares seem to occur in parallel as pitcher forms evolve and ultimately replace the jar forms. The difficulties in characterising and naming the different types within these wares, which often have only subtle differences in colour, texture and firing condition, is explained to some extent by the thin-section and chemical analysis which show that the majority are drawing on similar clay deposits. The growing urban population provided a market for entrepreneurial local potters who rapidly established themselves to the exclusion of most other contemporary regional products. The shelly wares continue to maintain only a small and diminishing share of the market. Their continuing presence might be due to the particular properties of their slight porous fabrics.

The Hallgate wares

The Hallgate wares as originally defined (Buckland *et al* 1979) continue to represent a useful division of the pottery from Low Fisher Gate. The red-firing Hallgate A, white-firing Hallgate B and coarser red-firing Hallgate C ware were all recognised on site, as were some of the variations noted by subsequent work (Hayfield 1984; Cumberpatch *et al* 1998–99). The Low Fisher Gate sequence has helped to establish their early origins in the splashed wares, their changing trajectory through the medieval period, and their demise and ultimate replacement in the later medieval period.

Hallgate A wares

Hallgate A ware was one of the major industries in South Yorkshire and dominates the medieval pottery market in Doncaster. The evidence from Low Fisher Gate, as well as work done elsewhere in the city (Cumberpatch *et al* 1998–99), suggests that it emerged out of a number of earlier related splashed wares in the course of the late twelfth and early thirteenth centuries. Defining true Hallgate A wares as opposed to earlier splashed ware types at sherd level can be difficult as the characterisation of the material is a product of the nature and application of glaze, decoration, form and fabric, and there are clearly a number of closely related fabrics drawing on the same clay sources. Earlier characterisations of the ware refer to this variability (Buckland *et al* 1979, 12; Cumberpatch *et al* 1998–99, 50).

Fabric

Hallgate A ware is essentially a wheel-thrown oxidised sandy ware which appears as a light red fabric, sometimes with a reduced core. There are variable amounts of rounded to subrounded quartz sand grains which give the surface a fine sandy

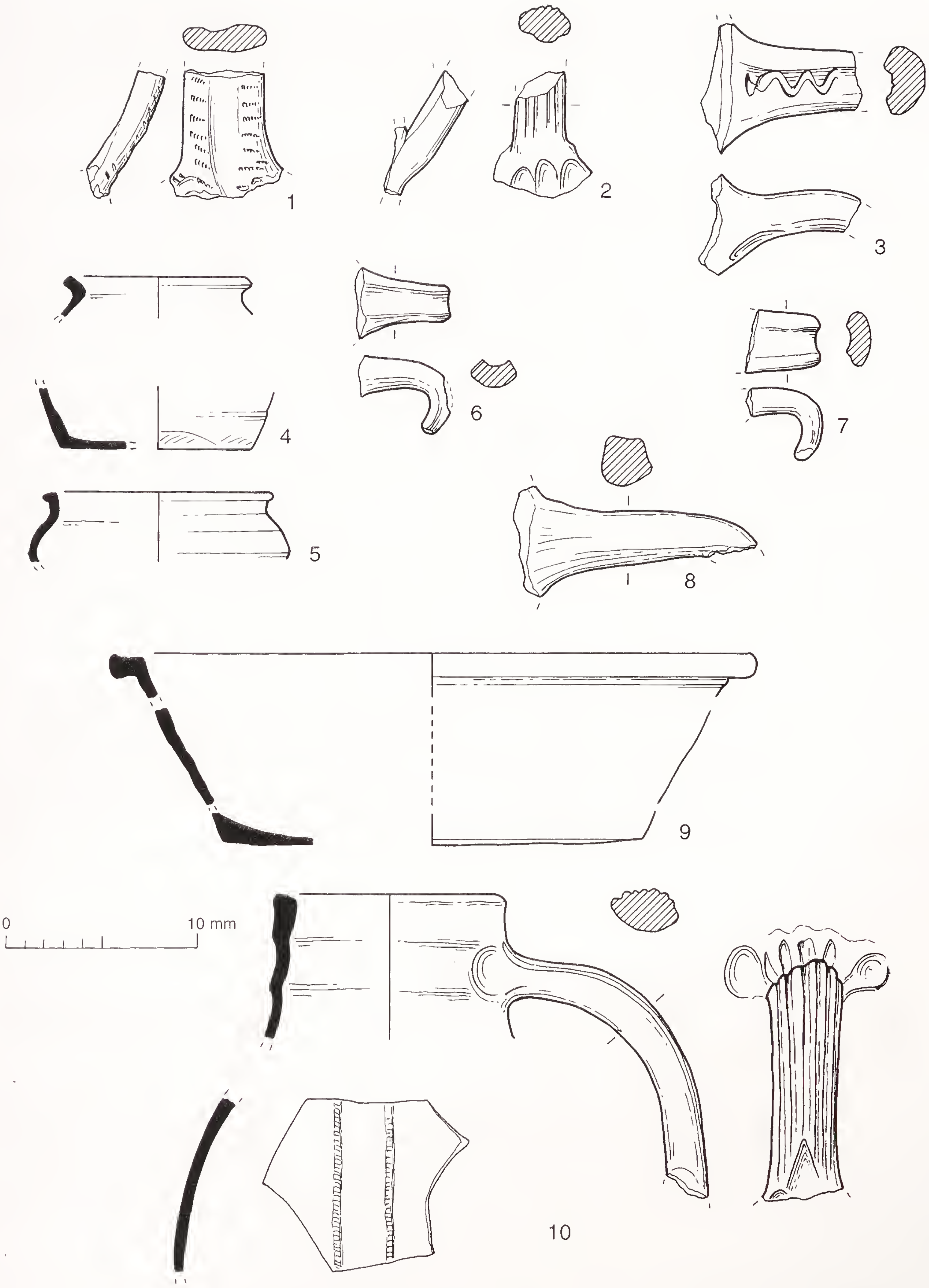


Fig. 23: Hallgate A ware (Phases 4–6)

feel. The variability within the fabric referred to in many publications is something to be expected for a ware which was produced on such a large scale over a period of 150 years or more. Some of the more identifiable variants are described below.

Forms

Buckland has illustrated a comprehensive range of forms of fully developed Hallgate A wares discovered in the original excavations (Buckland *et al* 1979, figs 6–16) and these were all recognised within the assemblage. Simple jar forms can be identified from Phase 6 onwards and continue in currency throughout the production of Hallgate A (Fig. 24, 3 and 5). At Low Fisher Gate it was possible to see the evolution of the wide-mouthed, strap-handled pitcher with a pinched lip, common in the second half of the twelfth century, evolve in the course of the first half of the thirteenth century to become a more slender jug form with a full suspension glaze. Although strap and thickened strap/rod handles co-exist during the early phases (Fig. 23, 1), rod handles become more common, the first being noted in Phase 4 (Fig. 23, 2). These are often deeply ribbed with two 'ears' and five indentations where the top of the handle joins the body. Strap handles continue to occur throughout the industry but by the central decades of the fourteenth century (Phase 10) rod handles (Fig. 27.1), often slightly flattened (Fig. 27, 2–3), predominate.

Jugs and/or pitchers with elaborate tubular bridge spouts occur from about the same time (from Phase 5 to Phase 7) and a parrot-beak spout (Fig. 25, 3) in a Hallgate A-related fabric occurs in Phase 8. In the later thirteenth century a longer-necked pitcher form with an everted rim, thickened flat top and rectangular flanged rim, frequently with a neck cordon, develops.

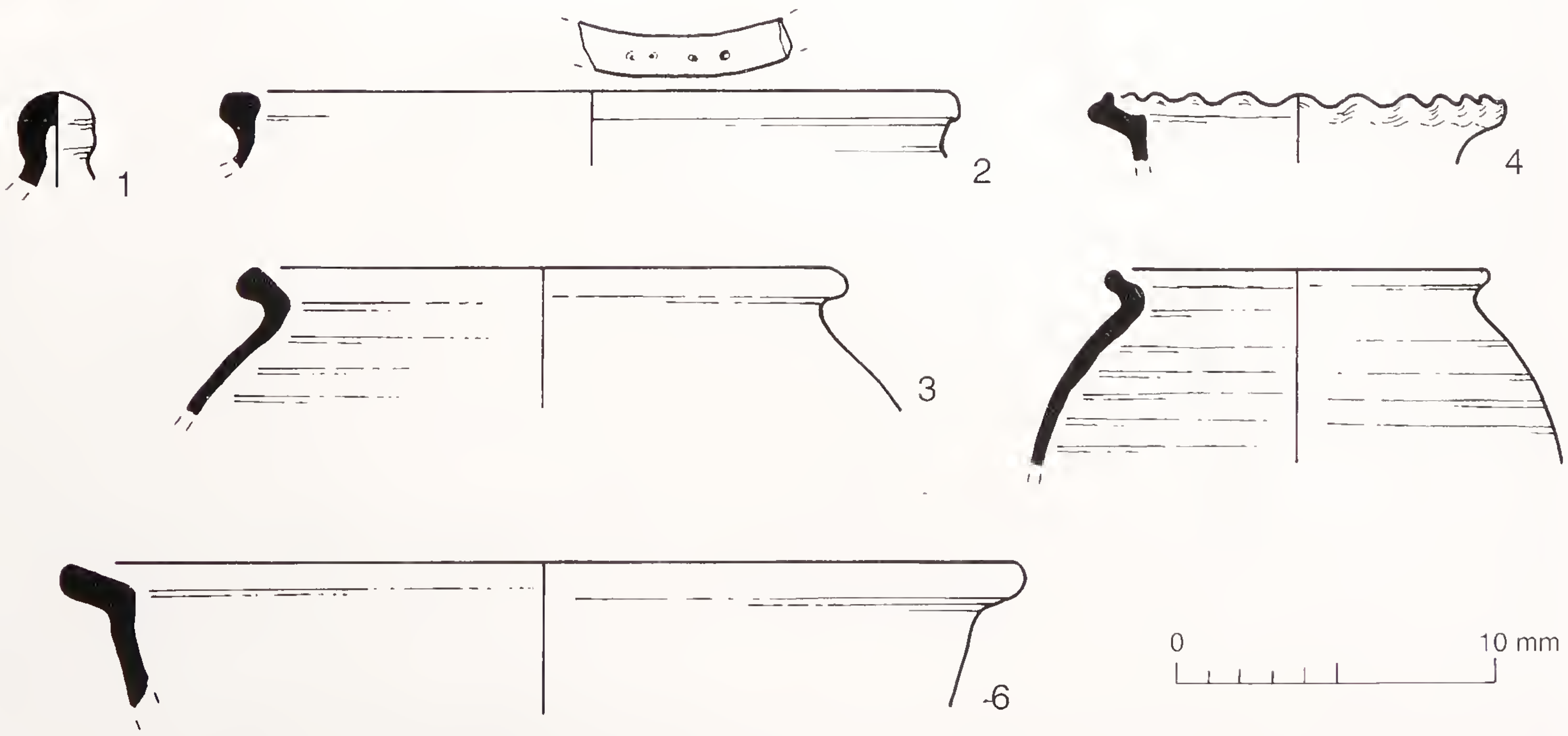


Fig. 24: Hallgate A ware (Phases 7–13)

Bowl forms with flanged rims are more rare than pitchers and occur from Phase 5 onwards (Fig. 23, 9, Fig. 24, 6). Small pipkins with hooked handles first occur in the later twelfth century (Phase 3) and are current through Phase 6 (Fig. 23, 3–8), with larger examples occurring in Phase 7. The foot of a tripod pipkin or cauldron

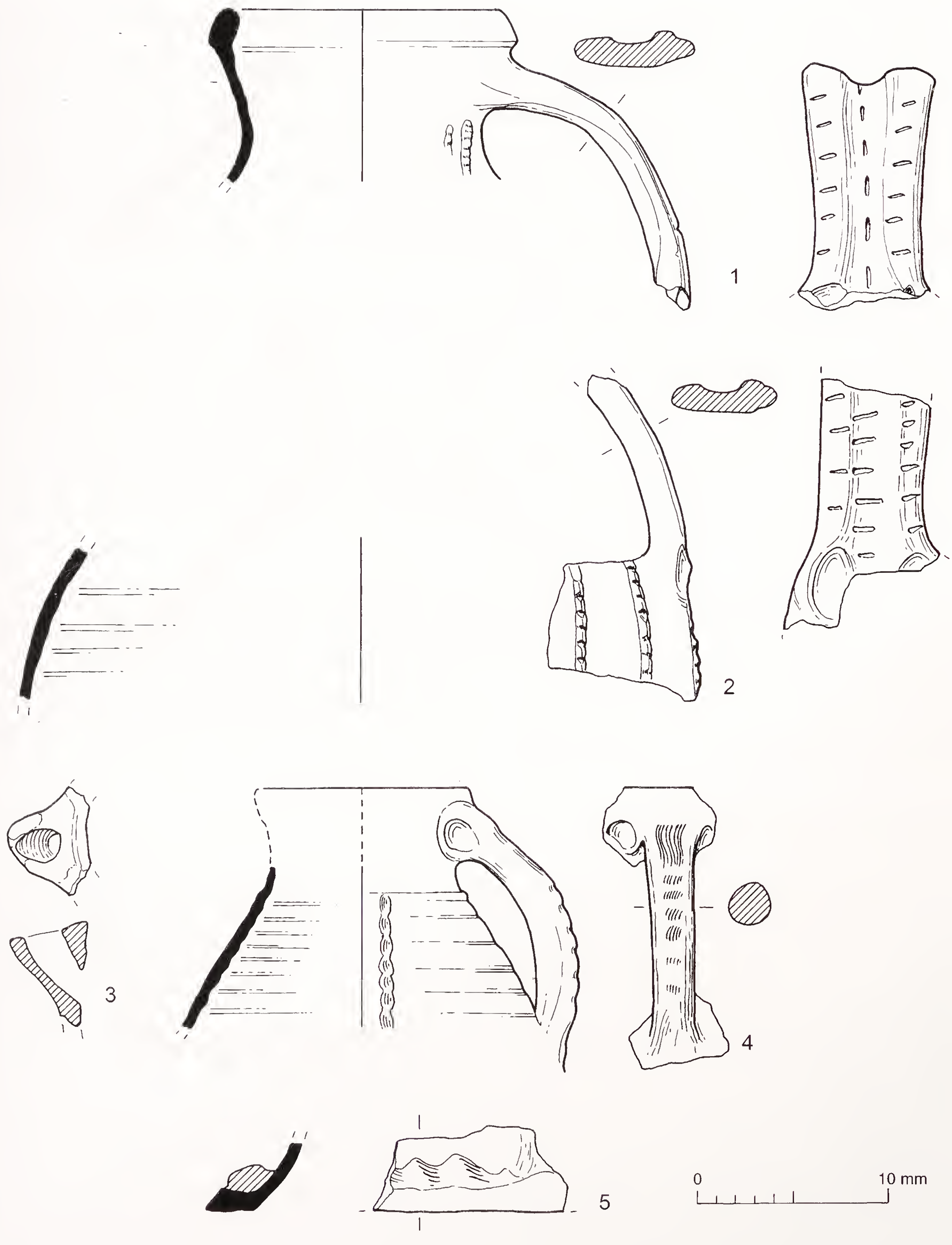


Fig. 25: Hallgate A ware (Phases 8 and 9)

was found in a late thirteenth-century context (Phase 6). Unusual forms include fragments of a possible curfew from Phase 8 (Fig. 25, 5) and an ovoid knop with a-chestnut-coloured glaze, perhaps from a lid, from Phase 7 (Fig. 24, 1).

Decoration

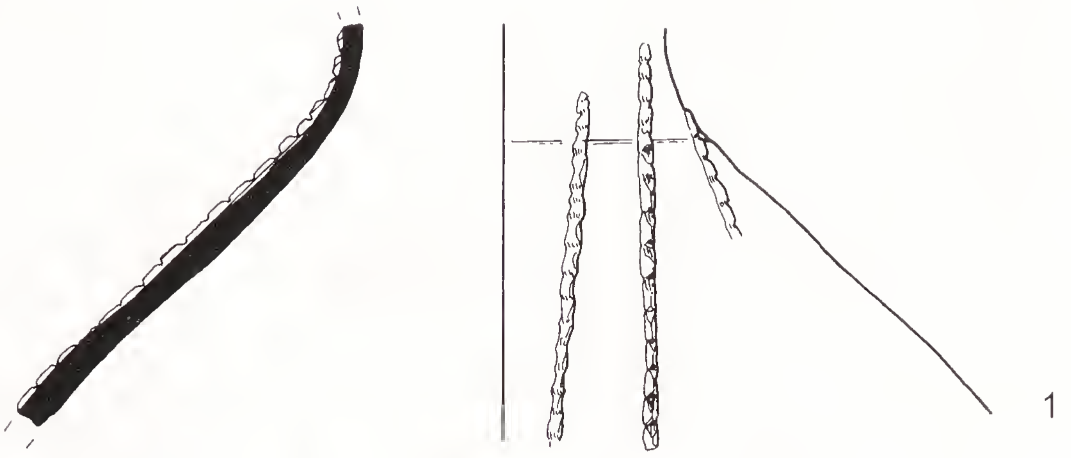
Pitchers are decorated from an early stage, decoratiom appearing first on some of the splashed ware 1/Hallgate A types. One such late twelfth/early thirteenth-century form, with the strap handle attached to the rim, has a crude 'S'-shaped strip of clay (Fig. 22, 1) applied to the centre. Other strap handles have short diagonal slashes down the sides (Fig. 23, 1), part of the repertoire of decoration seen on the original Hallgate material (Buckland *et al* 1979, fig. 13). Two or three thumb marks at the base of the handle are typical (Fig. 23, 2). A possible jug rim with thumbed rim edge is in an unusually fine, lightly oxidised unglazed ware (Fig. 24, 4).

Applied, thumbed, comb-decorated or notched vertical strips, often with iron staining, are common on the body of jugs from the early to mid-thirteenth century (Phase 5) (Fig.23, 10). Incised wavy line decoration occurs on strap-handled pitchers and jugs in the late thirteenth century (Phase 6), rows of roller stamped or combed square shapes and alternating vertical applied notched strips and scales occur by the early fourteenth century (Phase 7). Copper-glazed vessels with iron-rich applied strips in the late thirteenth to mid-fourteenth century (Phases 6–8) resemble wares from East Yorkshire.

By Phase 7 the potters' repertoire of decorative techniques has expanded to incorporate the use of pellets, notched strips, strips with criss-cross diagonal roller stamping, scales and wavy lines. After this highly decorated period, thin applied vertical strips with horizontal notches or tiny thumb impressions with little stab marks continue in use throughout the early and middle fourteenth century (Phases 8 and 9, Fig. 25, 1, 2 and 4 and Fig. 26).

Reduced Hallgate A wares (SRCD and FRCD)

Amongst the assemblage were a number of reduced sandy wares which closely resembled the Hallgate A wares and which are more common in the earlier phases. These were initially defined as sandy reduced (SRCD) wares and a finer reduced ware (FRCD) but are now believed to be part of the Hallgate A industry which had become either accidentally or deliberately reduced. The range of forms (Fig. 28, 1–3) is the same as the Hallgate A wares, being mainly pitchers but also, more rarely, bowls and pipkins with hooked handles (Fig. 28, 2). Decoration in the form of wavy incised lines, applied scales, strips and pellets, enclosed zones of scales and anthropomorphic decoration is the same as the Hallgate A wares. Once again, given the scale and longevity of the Hallgate A industry, it is only to be expected that variations will occur, especially in the early phases of the life of the industry. These are then subsumed into the mainstream Hallgate A wares as the major industry gets established.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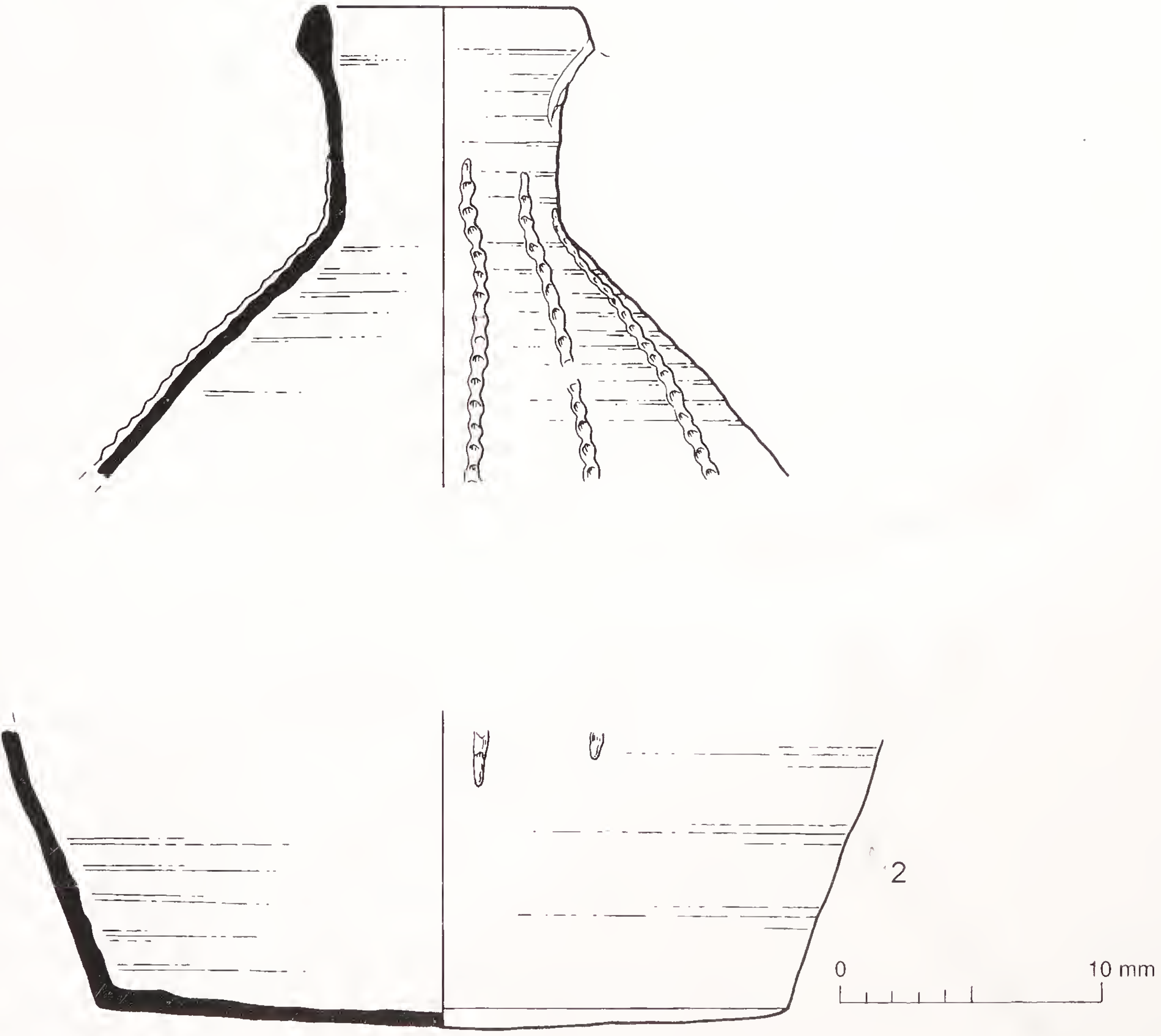
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Fig. 26: Hallgate A ware (Phases 8 and 9)

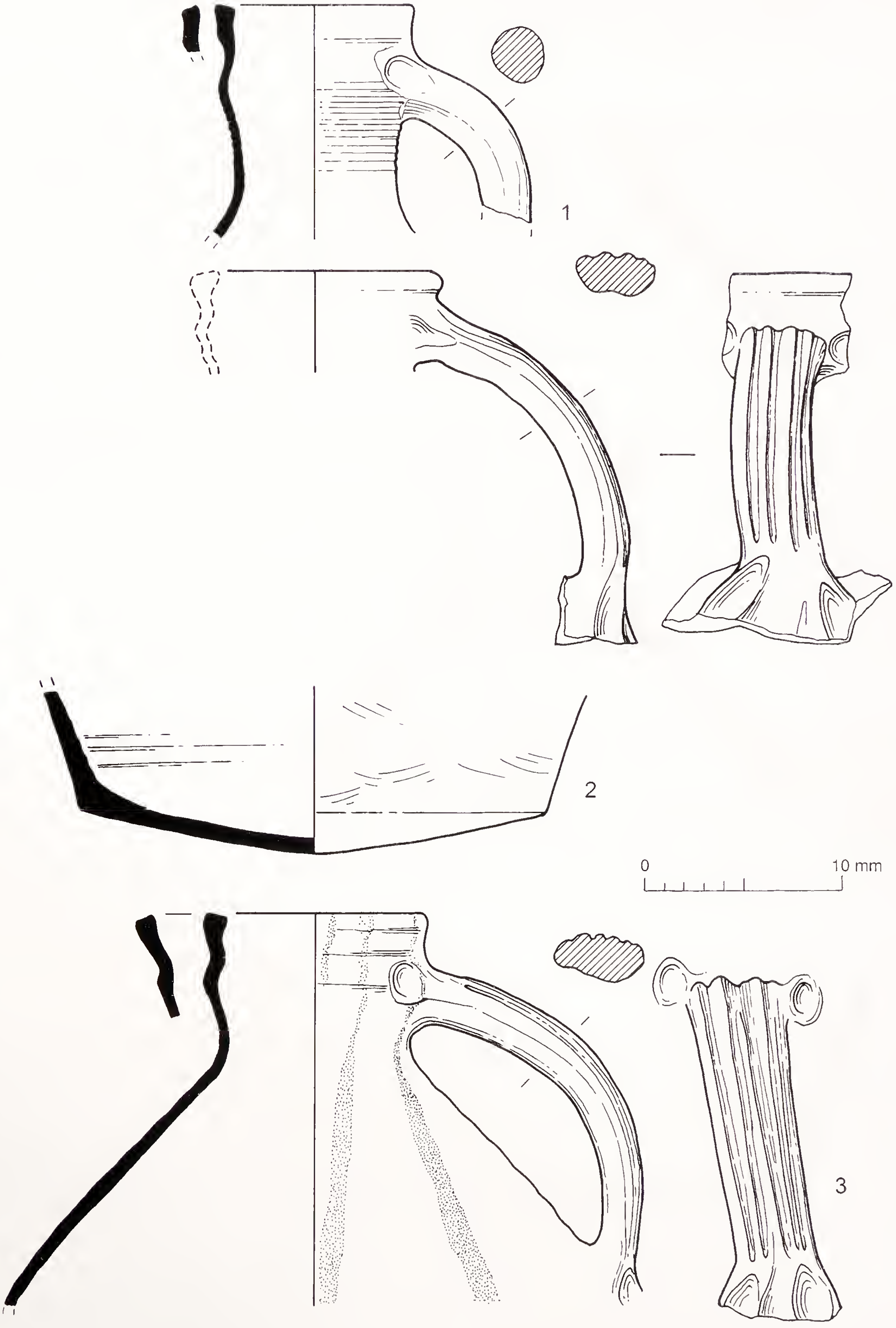

Fig. 27 Hallgate A ware (Phase 10)

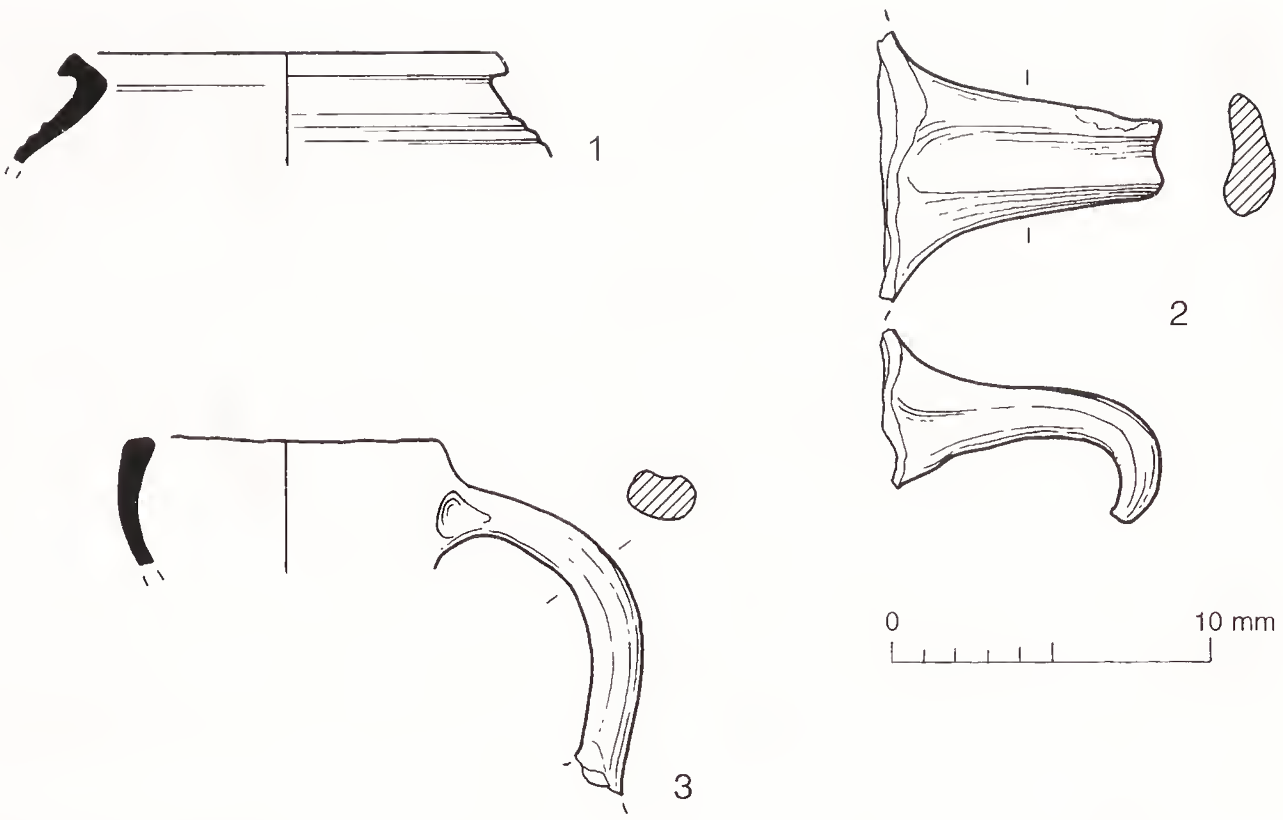

Fig. 28: Sandy reduced ware

Hallgate B wares

Hallgate B wares were another common type of medieval pottery recovered from Low Fisher Gate. These are buff/white-firing products which analysis has shown were produced from different South Yorkshire clays from those used for the Hallgate A wares. They were never as important as the Hallgate A wares and seem to peak earlier, possibly in two stages.

Fabric

Hallgate B has been described as a light, quite white or light buff-coloured, hard-fired fabric with fine-grained sedimentary and metamorphic rock fragments (Buckland 1979, 12) and a surface texture and colour resembling broken concrete (*ibid*, 12). The glaze is thin and a light olive green to yellow. As with the Hallgate A wares, Hallgate B seems to have had its origins in an earlier splashed ware (see Group C splashed wares above). Once again there is considerable variation within the range of products over time and the possibility of confusion between these wares and other buff- and white-firing products must be acknowledged. The difficulties in consistently separating these wares visually was emphasised by the thin-section and ICPS work carried out which showed overlapping between samples of glazed white wares which included Hallgate B, Rawmarsh and Firsby, all of which were made from closely related clays (Vince 2008).

Forms

The earliest forms amongst the Hallgate B wares are jars (Fig. 29, 1–2) and occasionally bowls (Fig. 29, 3). By the late thirteenth century, however, the majority of vessels are jug/pitchers (Fig. 29, 4–7) with strap handles and either pinched or

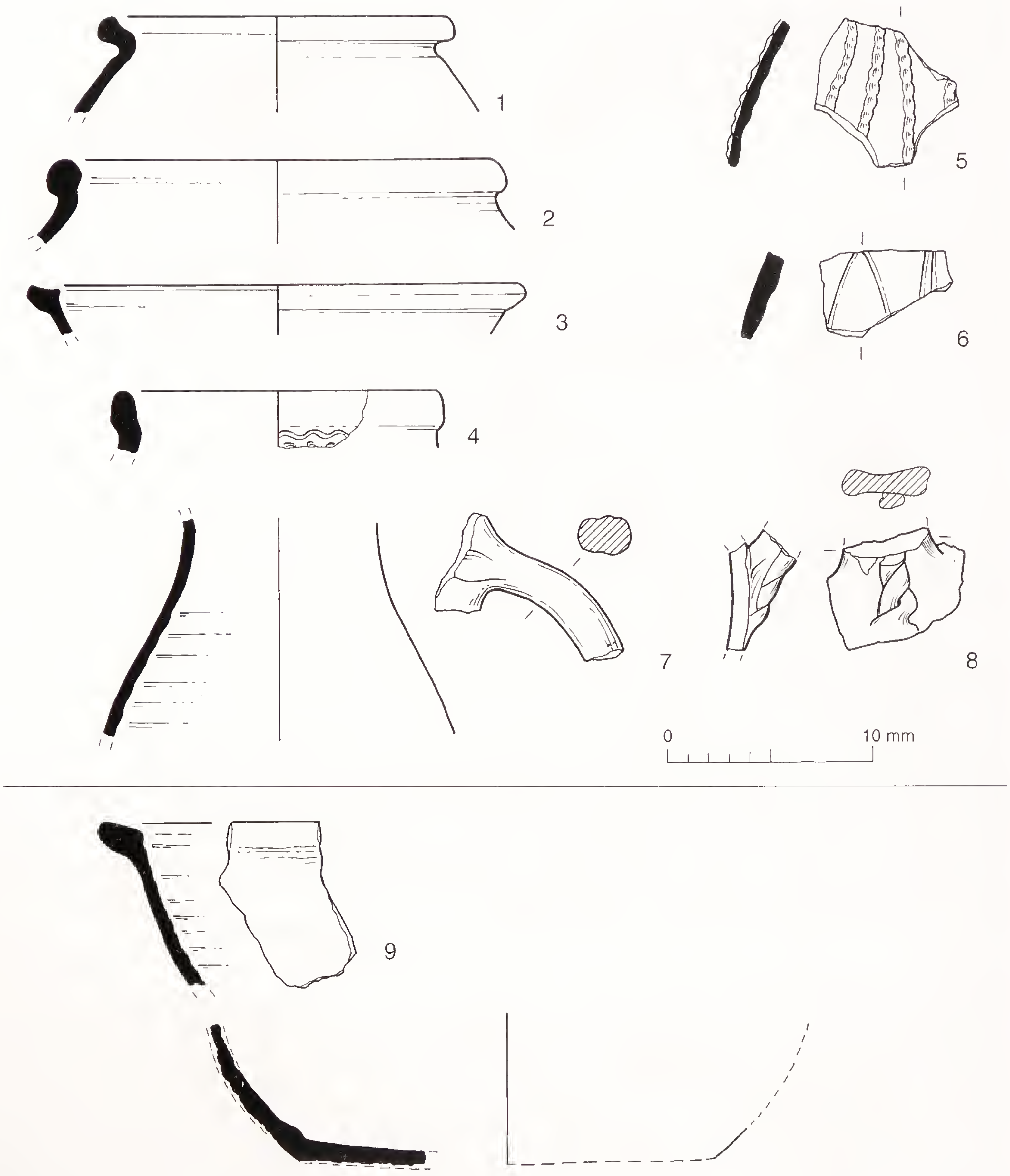

Fig. 29 Hallgate B and C

bridge spouts (Phase 7), and by the early fourteenth century occasional tubular spouts occur (Phase 9).

Rod handles occur only rarely (Fig. 29, 7) although by the early fourteenth century (Phase 8) pipkins with typical rounded, hooked handles occur. Unusual forms include the base of a pedestal lamp, perhaps already residual in an early fourteenth-century context (Phase 8) and a footed base.

Decoration

By the late thirteenth century (Phase 6) jugs are decorated with rows of circular comb stabbing and rectangular combed notches. Alternating thin ribs with applied scales and notches similar to the decoration on Stamford wares also occur.

Raised cordons and combinations of incised horizontal/vertical and wavy lines occur on jugs of an early fourteenth-century date (Fig. 29, 4) and at the same time the use of several vertical strips with thin horizontal notches, perhaps drawn from Stamford wares, becomes common (Fig. 29, 5). Occasionally vertical strips with diagonal rows of stabbing are also seen in contexts of a similar date (Phase 7) and these too resemble styles used by the Stamford and North French potters (see Vince and Jenner 1991, 107, fig. 2.115, no. 276). Only at the end of the industry's currency, around the mid-fourteenth century (Phase 9), do the jugs have multiple thumbing round their bases and thumbed or notched edges on the strap handles.

From their inception Hallgate B-type jars and bowls are usually plain but occasionally sherds of a late twelfth-century date (Phase 3) are decorated with vertical applied thumbed strips. This type of decoration also occurs later in the sequence in the late thirteenth century (in Phase 6) and by the early fourteenth century (Phase 7) jar rims occasionally have notches/comb-stabbed round holes along the upper surface of the rim. By the early/middle fourteenth century, pipkins with typical hooked rod handles are either plain or have combed decoration (Phase 8).

Date

Buckland originally suggested that Hallgate B wares were a late twelfth-century phenomenon but was uncertain about their continuation into the thirteenth century (Buckland *et al* 1979, 56). The assemblage from Low Fisher Gate, however, shows that while Hallgate B wares first occur in the late twelfth century (Phase 3) there appears to be a dip in the early thirteenth century (Phase 4) but then the wares are significant throughout Phases 5 to 7. Thereafter Hallgate B wares decline, though the rate of this decline is blurred by the problems of residuality and the possible importation of material referred to above.

Discussion

The early appearance of Hallgate B wares noted here and in Buckland's original report (Buckland *et al* 1979) might be connected with the origins of this ware in an earlier splashed glazed industry. Unglazed Hallgate B wares were difficult to distinguish from the Group C splashed ware type 4 in early phases. The splashed ware type declines and evolves into mainstream Hallgate B, mirroring the pattern seen with the Hallgate A wares and its earlier predecessors. This raises the possibility that a number of production sites might have been in operation over a longer period, with their origins in the mid/late twelfth century. The evidence suggests that, at the other end of its currency, Hallgate B wares are either replaced by or evolve into the white gritty wares and the white coal measures products (see below), and production moves out of Doncaster to places such as Firsby and Rawmarsh.

Hallgate C

Fabric

Hallgate C wares were the least common of the Doncaster fabrics originally defined by Buckland *et al* (1979, 12), and they believed they belonged to the late twelfth century. (*ibid*, 56). Soon after a group from the cattle market was identified as a related type but probably of a later, fourteenth-century, date (*ibid*, 60). Once again the evolution of this coarser oxidised ware might have its origins in earlier splashed varieties, examples of which were found at Hallgate 95 and called fabric C1 (Cumberpatch *et al* 1998–99, 51) and at the Market Place (Hayfield 1984, 41–43). Some of the early examples of this type from Low Fisher Gate compare with the earlier splashed varieties of Hallgate C ware in mid-twelfth-century deposits (Phase 2). There is a later resurgence of Hallgate C wares in Phases 10–13 which might equate with the cattle market material described by Buckland *et al* (1979, 60).

Form

The forms recovered from Low Fisher Gate include jars, jugs, bowl (Fig. 29, 1) and a possible curfew.

Date

Hallgate C wares are recovered in smaller quantities than the other Hallgate wares. The earliest occurrence is two unglazed sherds from the rim of a small jar recovered from a mid-twelfth-century context in Phase 2. After this, the ware occurs in small quantities in mid/later twelfth- to early thirteenth-century groups (Phase 3) and continues in small amounts until the mid-thirteenth century. In the Tenement Y sequence it seems to increase in numbers in the mid- and late fourteenth century (Phases 10–13). It is probably residual by the end of the fourteenth century.

Pottery wasters/seconds

Given the amount of pottery which had been produced in Doncaster during the medieval period, it is not surprising that wasters or seconds were recovered from the assemblage. These were mostly of the oxidised sandy wares in the Hallgate A type but there are occasionally others. These include three sherds of a fine white type which is decorated with scales and a cordon at the neck/shoulder join (Phase 5) and two sherds of a highly decorated jug. These might be related to the Hallgate B types, having similar decoration and, as far as can be identified, a related fabric. A single possible Hallgate C-type second or waster was recovered.

The majority of these sherds, however, belong to the broad category of Hallgate A-type wares and, as a result of overfiring, are similar to the sandy reduced ware and fine reduced ware variants, and the forms are of the types current in the Hallgate A wares. Some of these are not true wasters but could be sherds from serviceable but badly over-fired 'seconds'. These sherds first appear in small quantities in the early thirteenth century (Phase 5) and increase slightly in Phase 6, then decline in Phases 7 and 8. However, a considerable number were recovered from the mid-thirteenth century where they occur in the dumps over Building 9 in Phase 9 and are especially noted in Phase 10, suggesting that this activity occurred through the early and middle decades of the fourteenth centuries, possibly continuing beyond. It is of interest to note a mini-peak in the number of splashed 1/Hallgate wares and early medieval handmade wares in Phase 9 which might support the suggestion that this is imported material. After this finds of seconds/wasters are fewer and almost certainly residual.

There is no evidence of pottery production on the site and it seems likely that these over-fired examples have reached the site incorporated in levelling material brought from elsewhere in the city or simply dumped on the slopes down to the river. There is cumulative evidence for pottery production in the area which includes that found on the southern edge of the westbound carriageway of the A630 in the former cattle market area (Buckland *et al* 1979, 60) and, south of Fisher Gate towards the town, in the Market Place (Hayfield 1984, 43) between Fisher Gate and the suburban pottery production area in Hallgate itself. The Market Place material is earlier than the suggested date of these wasters/seconds whose occurrence on the site is chronologically closer to the cattle market area material. If this material is indeed deposited from elsewhere then the production date could, of course, be earlier. Nevertheless, the Low Fisher Gate assemblage raises the possibility that further pottery production evidence may be found in the old Friendly Street/Fisher Gate/Market Place area between the western edge of the town and the river.

Discussion of the Hallgate wares

The Low Fisher Gate assemblage has provided an opportunity to examine the progression and importance of the different Hallgate wares throughout the duration of the site. Reference has already been made to the distorting factors of residuality and the possibility of introduced material, and these need to be borne in mind.

The tables in the first part of the report show the gradual replacement of the earlier splashed varieties of Hallgate A type through Phases 3–7 by the fully developed Hallgate A wares, which then dominate the market through Phases 8–13, after which residuality is almost certainly significant.

The trend is revealed in more detail through the construction, occupation and demolition of buildings on Tenement Y, showing Hallgate A wares emerging and superseding the earlier splashed varieties through Phases 4–6 and dominating from Phase 7 onwards. It commands a large share of the market from Phase 8 to Phase 13.

Hallgate B wares were originally thought (Buckland *et al* 1979, 56) to be a phenomenon of the twelfth rather then the thirteenth century. In Tenement Y at Fisher Gate the peak is in Phases 5 and 6; thereafter it declines, though it continues to represent 20–30% of the assemblage in Phases 7 and 8, falling back in Phase 9 and continuing to decline.

Hallgate C wares, as proposed on scant evidence by Buckland *et al* (1979, 56, 60) are later, and do not make a big impact at Low Fisher Gate until Phase 10, after which they continue until Phase 13. An earlier occurrence in Phases 4–6 might equate with the earlier production of a closely similar fabric noted at the Market Place (Hayfield 1984).

Buff wares

Buff/white sandy ware (BWSN) and white sandy ware (WHSN)

Fabric

Two very similar sandy wares were recognised. These include a sandy buff or buff/white, very lightly oxidised ware (BWSN) with a fairly hard and dense texture and matrix. They contain moderate irregular subangular, milky, iron-stained and light grey quartz sand and haematite inclusions. Occasional rounded grains of haematite can be more than 5mm across. These wares have either a lead glaze or are unglazed. Variations in firing conditions give rise to a whiter-coloured, slightly softer, finer fabric (WHSN) which sometimes has a mid-olive green speckled glaze.

Forms and decoration

Unglazed jars/cooking vessels with small flanged or everted rims (Fig. 30, 1) and bowls occur in buff/white sandy ware from the later thirteenth century (Phase 7). Jugs, occasionally with tubular bridge spouts and a lead glaze, occur at the same time. Buff/white sandy ware forms include large, more open bowls from the mid- to late fourteenth century onwards (Phase 11) and a larger jug or cistern form by the mid-fifteenth century (Phase 15).

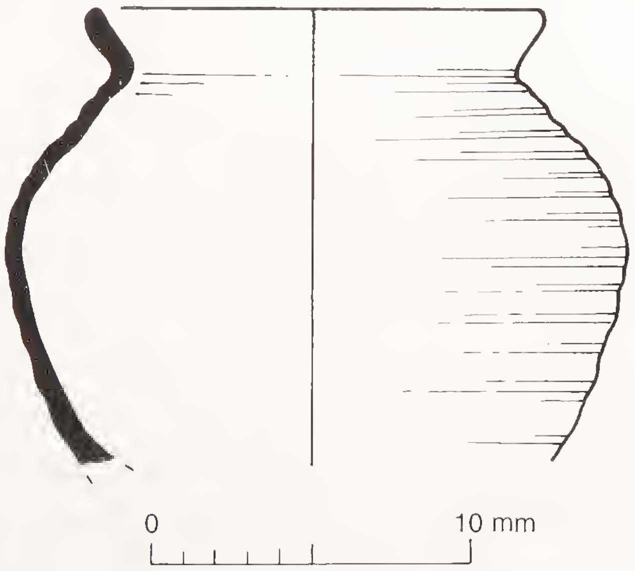

Fig. 30: Buff white sandy ware

The whiter white sandy ware is less common and is represented by jugs and jars decorated with a copper green glaze and applied strips, which are sometimes combed. Jugs with scale decoration occur by the first half of the fourteenth century (Phase 8) and resemble Scarborough ware I-type decoration. Other mid-fourteenth-century types are decorated with pellets and strips (Phase 10). Their similarity with wares from North Yorkshire suggests a source in that area, though a local source is also possible.

Date

Both buff (BWSN) and white (WHSN) sandy wares are minor types which first appear by the early fourteenth century (Phase 7) and decrease subsequently in Phases 8 and 9, though WHSN is always less frequent. While BWSN peaks again in the mid-fourteenth- to mid-fifteenth-century deposits (Phases 11, 13 and 15), the white fabric (WHSN), always a minor type, disappears from the record by the mid-fourteenth century (Phase 11). Whether the occurrence of BWSN is due to chronologically later production or residuality is not clear though either explanation is possible.

Buff glazed ware (BUFGLZ)

Fabric

Buff glazed ware is another very fine sandy fabric which is characterised by buff surfaces and a light grey core. It has very thin oxidised orange internal margins and surface, and a thin white external margin under a rich glossy glaze. This ware is similar to a Scarborough II-type ware produced in Nottingham and may be related to them (Alan Vince, pers. comm.).

Form

This is a minor ware and only fragments of jugs are represented. Sherds have a copper green glaze which can be quite light coloured and are occasionally decorated with applied scales or strips.

Date

These wares only ever occur in relatively small quantities from the late thirteenth to mid-fourteenth century (Phases 7 to 9) though similar wares found in Lincoln have been tentatively given an early thirteenth-century date (see Young and Vince 2005, 133).

Scarborough-type wares I and II

Fabric

Scarborough ware fabrics have been described elsewhere in detail (Farmer 1979). Phase I fabrics are often softer and fully oxidised, and Phase II fabrics are finer, harder and whiter. These wares are very similar to other fine oxidised sandy wares (see FNOX and FRCD) recovered from Low Fisher Gate and there is the possibility of confusion.

Form

Jugs are the most common form, although sherds of a possible jar are also present.

Decoration

Jugs have rod handles (Fig. 31, 2 and 4) and are usually highly decorated with combed decoration (Phase 5) and applied scales and strips from the late thirteenth century (Phase 6 onwards). There is an example of a knight jug (Fig. 31, 3) and a face jug (Fig. 31, 1). Cumberpatch (2006) has noted applied faces on Hallgate A

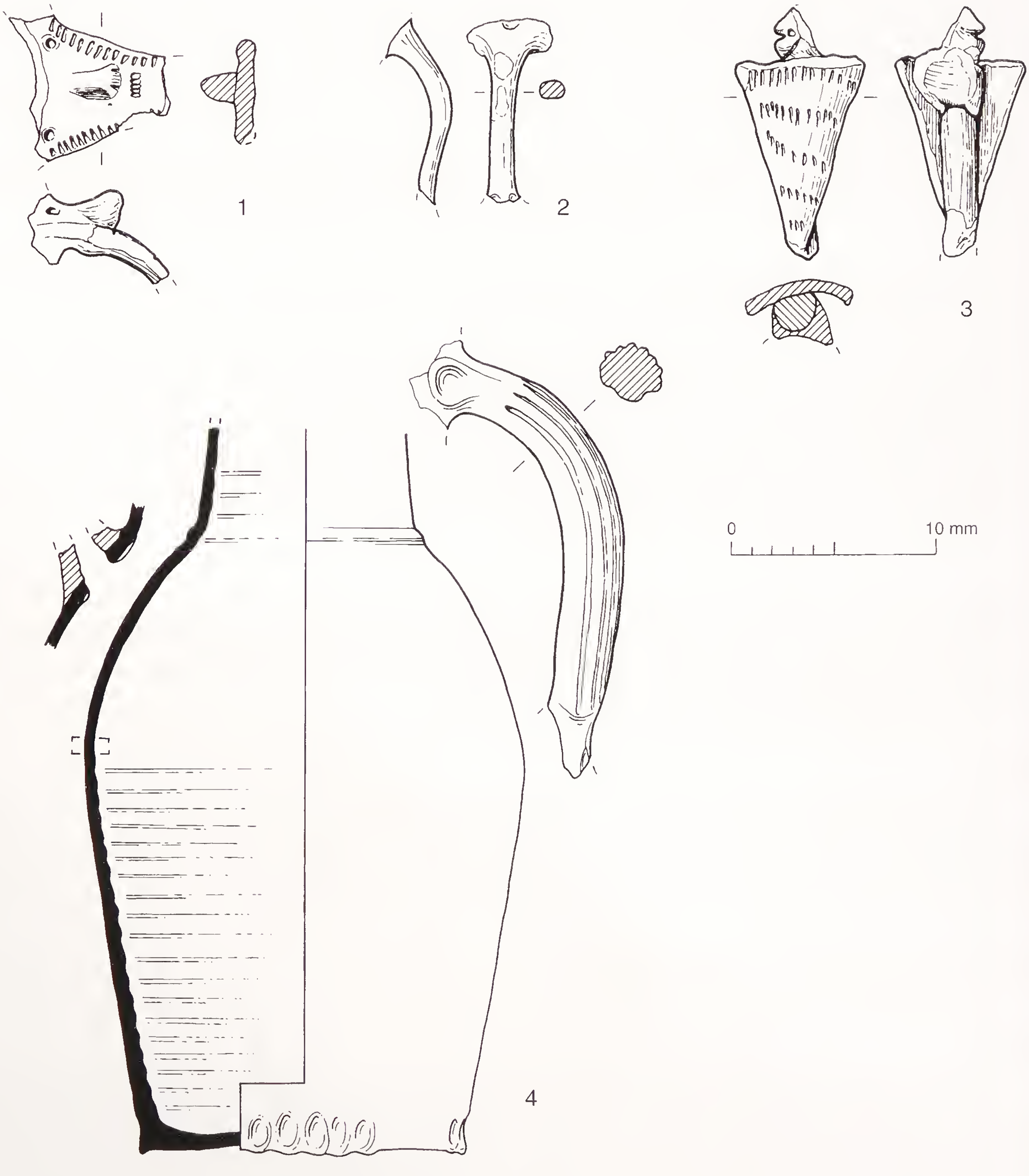

Fig. 31: Scarborough-type ware

and Beverley type 2 fabrics, showing that the style of decoration is not restricted to Scarborough alone, and it appears that Scarborough-type fabrics might have been made at a number of centres (see below).

Date

Farmer's initial dating, based on material from Scarborough itself, suggested that type I was a late twelfth/early thirteenth-century phenomenon and that type II was in production/use from 1225 to 1350. Since the late 1970s and early 1980s there have been reports of this ware being found in stratified contexts and in association with Saintonge polychrome jugs dated to the late thirteenth/early fourteenth century (Watkins *et al* 1982). However, a similar earlier type has been noted in Lincoln from earlier thirteenth-century contexts (Young and Vince 2005, 128), thin-section analysis pointing towards similarities with Lincoln glazed ware fabric A.

At Low Fisher Gate Scarborough wares were never an important part of the assemblage in any phase. Three sherds of a jug were recovered in late twelfth/mid-thirteenth-century deposits (Phase 5) and amounts remain at this low level until they increase very slightly in Phase 9, rising to a small peak (c.3–3.5% overall) in Phase 11 (mid/late fourteenth century); they were found especially in Tenement Y (Table 23).

Beverley wares

Fabric

This is a fine oxidised calcareous ware with few visible inclusions and a mottled or copper-coloured suspension glaze (Watkins 1987, 82–93; Watkins 1991, 80–86; Didsbury and Watkins 1992, 108–11). The lack of visible inclusions makes it difficult to distinguish these types from other fine sandy wares including Hallgate A, fine oxidised wares and Scarborough types, and these are part of a widespread tradition of oxidised wares in and around East Yorkshire.

Forms

Only three forms, all wheel-thrown, were identified: two jugs and a possible aquamanile (Fig. 32, 1). One of the jugs was thin-sectioned (V4861), having origi-

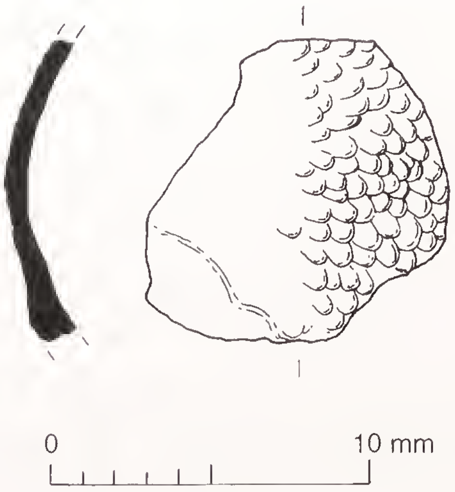

Fig. 32: Beverley ware

nally been classed as a possible variant of Hallgate A, and has a copper glaze and vertical, applied, notched strips, similar to those used to decorate Stamford glazed ware jugs. The second jug, decorated with applied strips forming triangular enclosures and infilled with scales, was classed as a fine oxidised ware (V4869) but in both cases a Beverley source is considered likely. The possible aquamanile body sherd also has applied scales and a mid- to light green glaze.

Date

Beverley types are thought to occur from the mid-twelfth to mid-fourteenth centuries, the twelfth-century types being splash glazed (see splashed ware type 5 above). The vessels described here are of the later thirteenth- and fourteenth-century types and are always a minor part of the assemblage.

At Low Fisher Gate, the jug with triangular decoration belongs to Phase 5, mid-thirteenth century, while the jug with applied notched strips occurs in the early decades of the fourteenth century (Phase 9). The aquamanile was recovered from Phase 14, at the end of the fourteenth century, which is at the end of their currency (Young and Vince 2005, 119). Later occasional sherds are believed to be residual.

Tees Valley-type ware (TEES/WHSLP)

Fabric

A few sherds of Tees Valley-type wares are characterised by their sandy, light red-firing matrix, white slipped external surface and mottled green glaze (Alan Vince, pers. comm.).

Date

These are a minor ware (always less than 1%). Jug and jar sherds (Fig. 33, 1) first occur in contexts dated to the late thirteenth century (Phase 6) though a larger number of sherds are present in Phase 9, mid-fourteenth century. Sherd counts drop in Phase 10, after which they are residual.

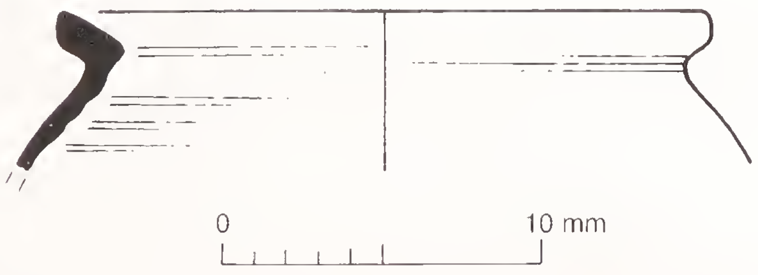

Fig. 33: Tees Valley-type ware

York glazed ware (YGW)

Fabric

York glazed ware is a coarse, open, white-firing fabric with occasional rounded red particles of iron or iron-stained quartz sand. A slight, possibly earlier, variant (early York glazed ware) has also been noted in York and this has a similar but lightly oxidised fabric with a light yellowish-green glaze with bright green spots (Brooks 1987).

Form

The sherds from Fisher Gate are likely to be from the typical jug form, though they are too small for positive identification (Fig. 34, 2).

Decoration

One jug sherd from a mid-fourteenth-century context (Phase 10) has green glaze and an applied seal (Fig. 34, 1), filled in with applied rows of diagonal scales, on the shoulder. An almost exact parallel can be seen in the collection at the Yorkshire Museum (Jennings 1992, 41, no.34). Sherds with a yellowish glaze and brown pellets, perhaps deliberately attempting to copy the typical yellow-glazed Rouen wares, are more common. These types occur earlier than the green-glazed sherds, in Phases 6–8 (late thirteenth/early fourteenth centuries). Hallgate B sherds are also occasionally decorated with similar brown pellets and yellow glaze, suggesting cross-fertilisation of ideas.

Date

York glazed ware is dated from the late twelfth to mid-thirteenth century (Brookes 1987, 151; Jennings 1992). Early York glazed ware is represented here by a few sherds which occur in deposits dated to the first half of the fourteenth century (Phase 9) when they must already be residual. Otherwise York glazed ware is noted at Low Fisher Gate from the end of the twelfth century to the mid-fourteenth century. A few closely related sherds with pellet decoration were found in a mid-fourteenth-century context (Phase 12) and may be of a local South Yorkshire origin.

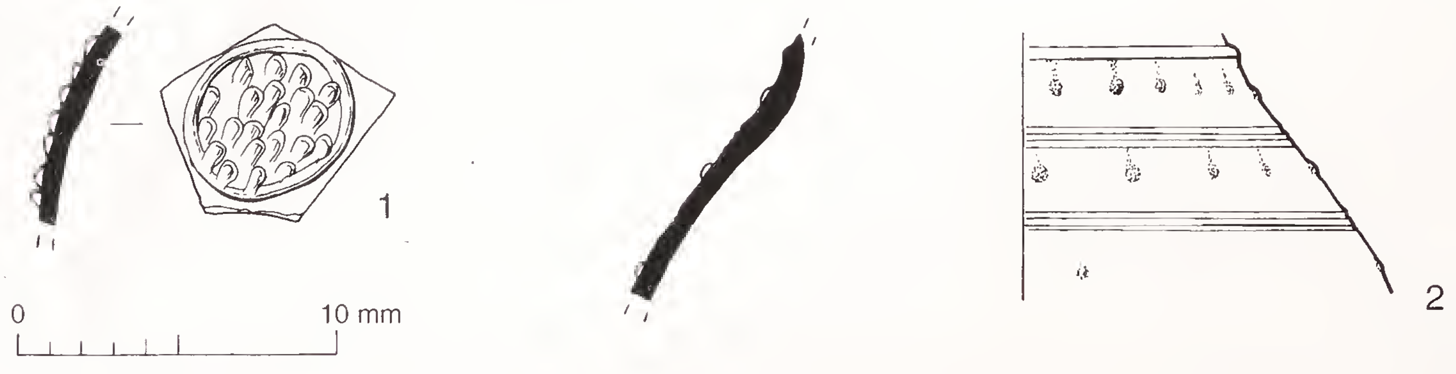

Fig. 34: York glazed ware

Brandsby-type ware

Fabric

Brandsby-type wares are typically white or pale grey lightly gritted wares, resembling York glazed ware but denser. Recent thin-section and ICPS analysis suggests that this industry might form a continuum with the York glazed wares (Mainman and Jenner forthcoming).

Form

At Low Fisher Gate only jug sherds were recorded although bowls and jars are known among assemblages in York.

Source

A production centre has been noted at Brandsby, North Yorkshire, though it is thought likely that a number of others may also have been operating in the Hambleton Hills area (Brooks 1987, 153).

Date

At Fisher Gate, these wares only occur in small quantities (always less than 1%) in late thirteenth/early fourteenth-century contexts (Phase 7) and in the mid- to late fourteenth century (Phase 10). These dates fit well with its occurrence in York from the mid-thirteenth to mid-fourteenth centuries, after which it is thought to be residual.

Humber ware

Forms

Amongst the Humber wares, jugs predominate in the later thirteenth century (Phases 6–8). Less common are pipkins which occur from the first half of the fourteenth century (Phase 8) and jars from the mid-fourteenth century (Phase 9). Handles change from a predominance of rod handles to strap handles in the later thirteenth/early fourteenth centuries. Small Humber ware drinking jugs and large strap-handled jugs occur from the mid-fifteenth century (Phase 15) and continue in smaller quantities through the fifteenth and into the sixteenth century, at which point they are probably residual (Phase 17). An unusual handle attachment has a pre-firing hole pierced through (Fig. 35, 1), another has applied thumbed strips splayed out from the lower handle/body join (Fig.35, 2). Cisterns, identified by bung holes, occur in the late fifteenth/sixteenth century (Phase 17). The oxidised fragments of a curfew found in Phase 8 might be a Humber ware variant or of Staxton type (Fig. 35, 5).

Decoration

Jars and pipkins are frequently plain but decoration on the thirteenth/early fourteenth-century jugs includes vertical, applied thumbed or stabbed strips (Phases 6–8). The decoration seen on some (eg Fig. 35, 3) is paralleled on the Hallgate A wares. By Phase 8 the repertoire includes horizontal stabbed/roller-stamped marks, applied strips and scales and white slip, and some have copper in the glaze. Polychrome green and brown alternating strips occur from the late thirteenth to mid-fourteenth century. Bosses and stamps include a wheat ear stamped boss (Fig. 35, 4) and a raspberry stamp in the late fourteenth/early fifteenth century (Phase 15).

Date

Oxidised Humber wares first occur in the later thirteenth century (Phase 6),

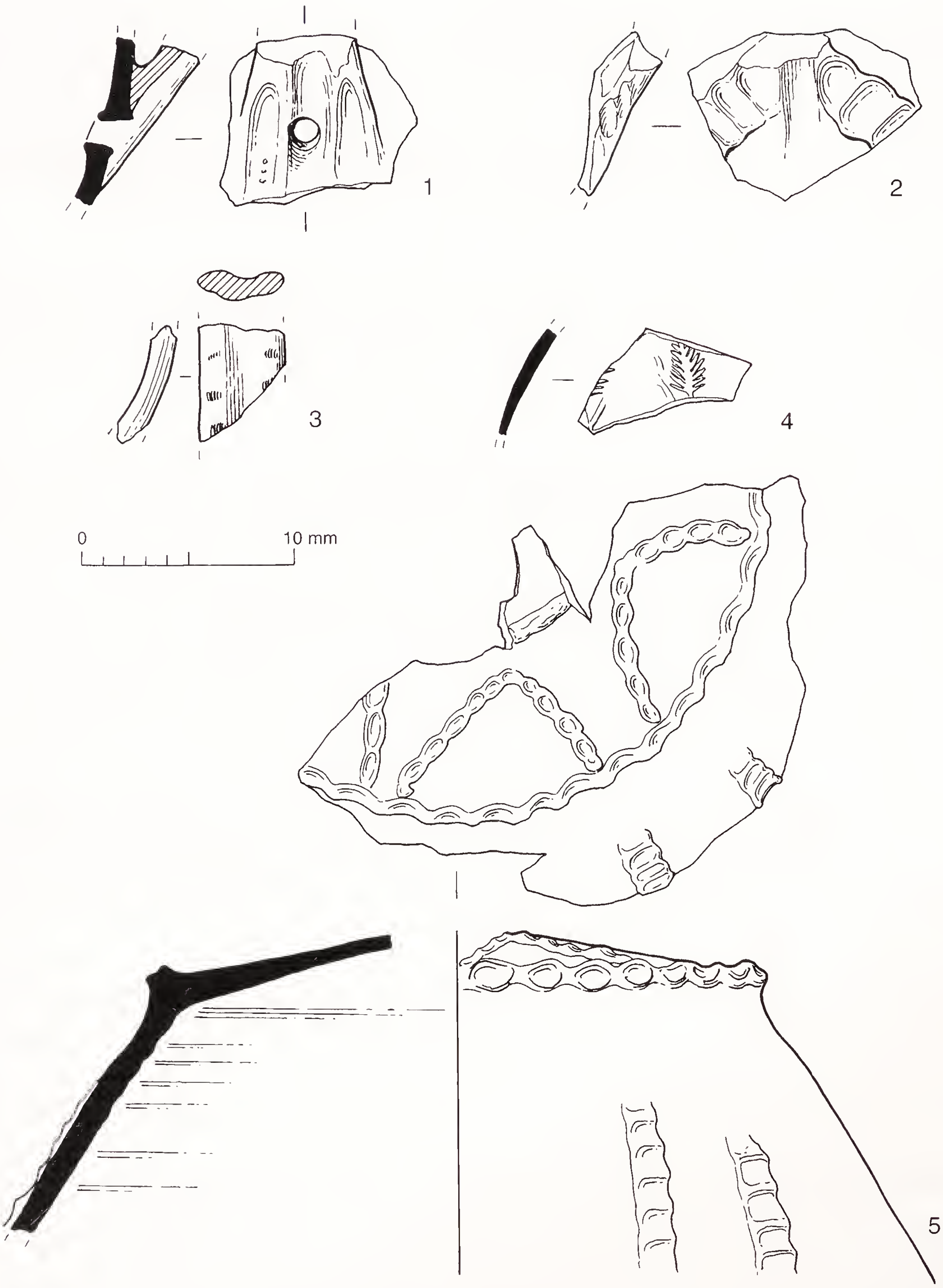

Fig 35 Humber ware

which is consistent with other findings for Hull and Doncaster (Watkins 1987; Buckland *et al* 1989b, 373). At Low Fisher Gate, Humber wares with reduced cores rise to a peak in the late fourteenth/fifteenth century. They are clearly in competition with the dominant Hallgate A fabrics in the late thirteenth/early fourteenth century (Phases 6–8) but become more significant in the late fourteenth/fifteenth centuries (Phases 14–15) when Hallgate A is on the decline.

Oxidised sandy ware (OXSN, FNOX)

Fabric

Oxidised sandy wares have a coarse sandy fabric with oxidised surfaces, thick margins and light grey reduced core. They have a brittle feel and moderately hackly break. A finer variety, classed as FNOX, was also recognised.

Form

Sherds were only recovered from possible jars and jugs with collared rims (Fig. 36, 1–2).

Date

This type first occurs in mid/late fourteenth-century deposits (Phase 10) and peaks in the later fourteenth century, although the finer variety occurs slightly earlier (Phase 9). It is present in relatively small quantities throughout the rest of the sequence.

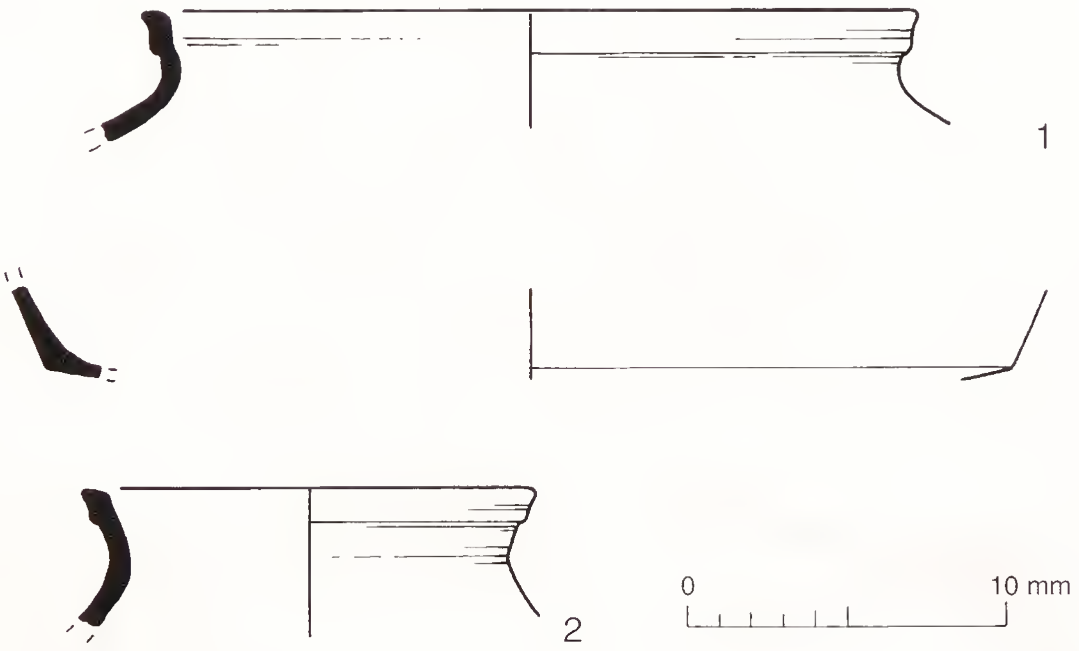

Fig. 36: Oxidised sandy ware

London-type wares

Fabric

London-type wares are of a light brick-red to brown-coloured fine sandy fabric, described elsewhere in more detail (see Pearce *et al* 1985, 2–3).

Form

Forms recovered include squat pitchers like those found in London (Pearce *et al* 1985, fig. 19, 36) and green-glazed baluster jugs.

Decoration

The squat pitchers have white-slipped horizontal bands at the neck and vertical bands down the body.

Date

Sherds from squat jugs are found in late twelfth-century deposits (Phase 3), a date consistent with their occurrence in London (Pearce *et al* 1985).

Sandy oxidised ware with medium sized grains (SMOX)

Fabric

Another oxidised sandy ware has a fairly hard fabric with a very fine matrix, moderate-sized quartz and small subangular white possibly calcareous inclusions. It can be oxidised throughout or reduced to a dark grey at the core. Some have lightly reduced, light brownish-grey margins and internal surface.

Form

Forms are mostly jugs, often with shiny green copper glaze.

Decoration

One jug sherd has two parallel, slightly diagonal, applied strips with a vertical row of applied scales between. This is probably part of a repeated pattern around the body of the jug. The surface is covered by a thin, shiny, slightly patchy, mottled light green glaze.

Date

One sherd, found in a context dated to the late thirteenth/early fourteenth century (Phase 7), may be intrusive. This minor ware type never occurs in any quantity but is present from Phases 10–15, never comprising more than 3% of the assemblage.

Source

This ware resembles wares from east Yorkshire, having similar calcareous inclusions.

Coal measures types

This group of closely related fabrics includes categories referred to generically as coal measures (CM), white coal measures (WHCM) and purple coal measures (PURPCM); production is known to the west of Doncaster at Rawmarsh and Firsby.

The Rawmarsh fabric tends to be coarser than the slightly finer types from Firsby.

Coal measure wares (CM)

Fabric

This white-firing ware visually resembles Hallgate B ware and white-firing coal measure ware (WHCM; see below) but is harder and higher fired and its light grey colouring makes it look even more like concrete. It is likely that these wares form a continuum over time and were probably made in several different production sites.

Form

Forms are mainly jars (Fig. 37, 1–5) and jugs in the earlier phases but by the late fifteenth century (Phase 16) open forms are more common. In Phase 17 the range reflects that of purple glazed wares (PURPCM; see below) and includes a cauldron with two handles, jugs, jars, a wide bowl/pancheon shape and cisterns (Fig. 37, 6).

Date

This type is present in small quantities from mid-fourteenth-century contexts (Phase 11 onwards) and continues at a low level through to the end of the fourteenth/early fifteenth century (Phase 14) when it accounts for about 1.5% of the assemblage. By the mid/late fifteenth century (Phase 16) it accounts for just over 13% of the assemblage in Tenement Y (Table 28), which represents a peak as it declines

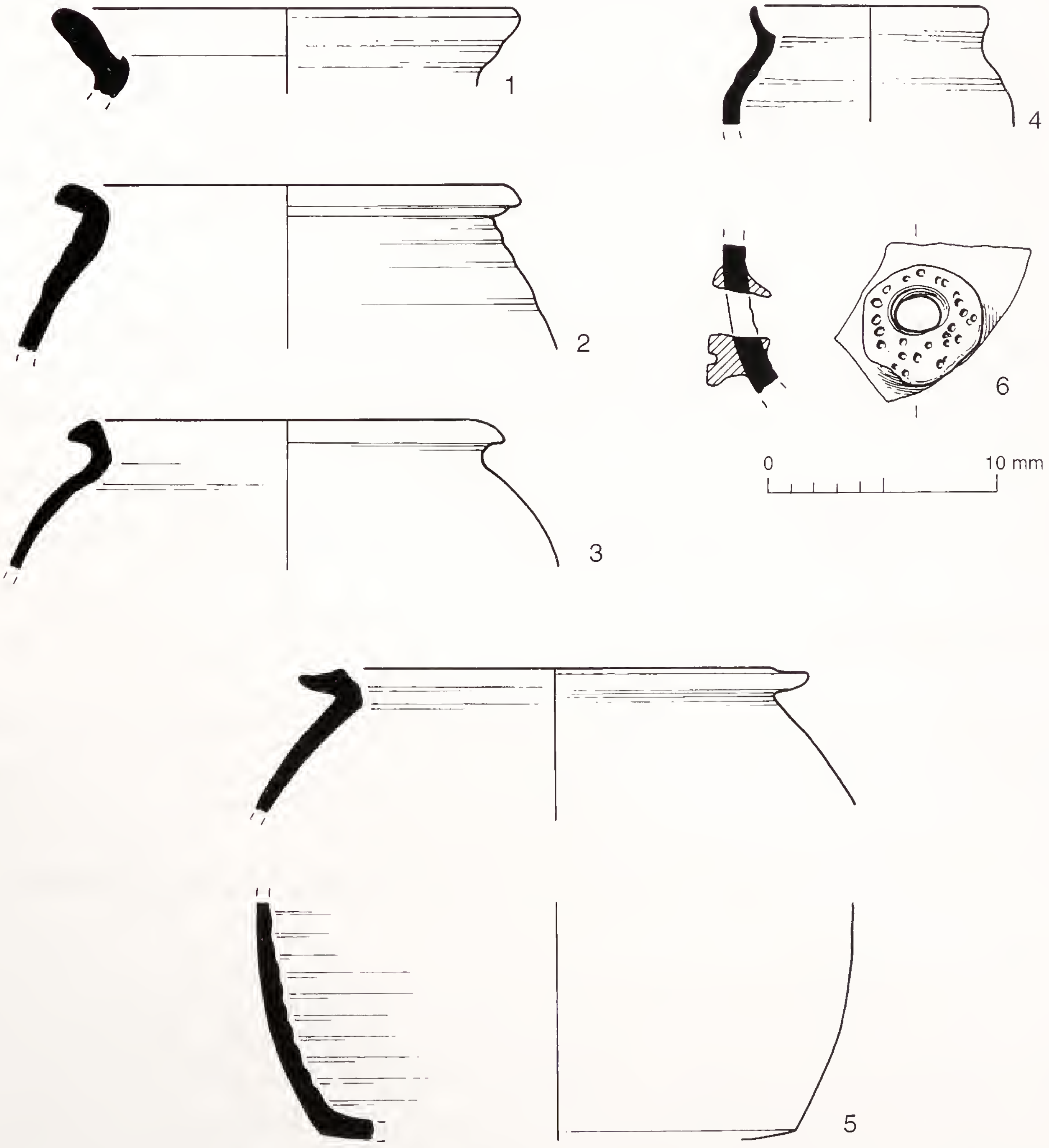

Fig. 37: Coal measures ware

in Phase 17 and continues to diminish thereafter. The dominant pottery type in this phase is the purple-glazed version of this ware (PURPCM), which accounts for just over 15% of the total assemblage, suggesting that these types overlap.

White coal measures ware (WHCM)

Fabric

This is a white, often highly fired and quite brittle fabric, with a medium grey core, thick white margins and buff to white surfaces, often with a thin light olive green patchy glaze. The matrix is quite fine and very slightly laminar with moderate to abundant mainly rounded iron pyrites. These inclusions are larger and more sparse than those of buff/white (BWSN) and white (WHSN) sandy wares and also better sorted.

Form

Jugs in this fabric have a patchy light olive-green glaze and a small flattened rod handle which changes to a wider strap handle over time. Jars (Fig. 38, 1) and/or jugs with everted or collared rims (Fig. 38. 2 and 3) are both common during the fourteenth century (Phases 7–13). By the late fourteenth century open forms, including bowls (Fig. 38. 4), begin to appear in the record and by the mid-fifteenth century pipkins and cisterns (Fig. 38, 5) are added to the range of forms, together with small drinking jugs (Fig. 38, 6).

Decoration

Jars and jugs are mostly plain though one jug has horizontal combed ribs at the rim.

Date

White coal measures fabric begins to appear in small quantities from the early fourteenth century (Phase 7) into the middle decades of the fourteenth century (Phase 11), after which there is a sharp increase in numbers. It continues to make up a significant proportion of the assemblage from the late fourteenth to the mid-sixteenth century (Phases 12–17).

Source

Thin-section analysis, ICPS and comparisons with samples from Doncaster point towards a source somewhere in the South Yorkshire area, possibly Firsby (see discussion below).

Purple-glazed coal measures ware (PURPCM)

Fabric

This fabric has a light grey, coarse, highly fired body and rough pimply texture. It has angular quartz and haematite inclusions and a purple, sometimes almost metallic, glaze.

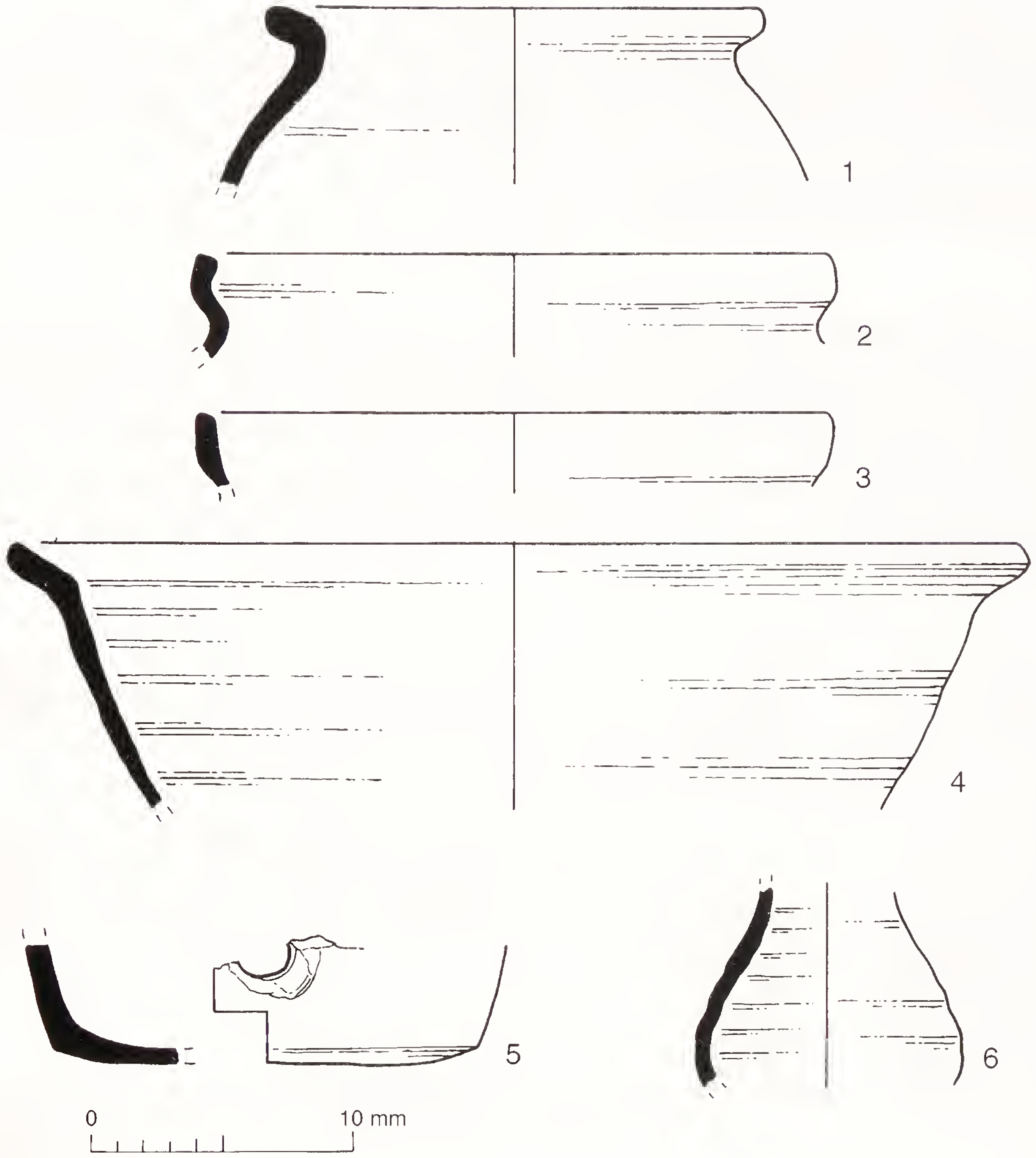

Fig. 38 White coal measures ware

Form

Jugs, jars and open forms give way to an assemblage almost entirely dominated by cisterns, with only a few jugs by the mid-fifteenth to mid-sixteenth century (Phase 17), though cisterns first occur from the late fourteenth/early fifteenth century (Phase 14). These crudely made jugs and cisterns often have uneven, thumbed rim surfaces and fairly slender bodies with flat, knife-trimmed bases (Fig. 39, 1–3, 5). One crudely made jar, possibly two-handled, with thick walls (1cm) has a thickened (2cm) rim with rounded external rib and flattened top (Fig. 39, 4).

Date

Occasional green-glazed jug sherds with patches of purplish glaze can be seen from the early fourteenth century (Phase 8) onwards but are rare until the late fourteenth century (Phase 13). In the following phase the ware increases to almost 6% and continues to increase until it reaches a peak in the late fifteenth/early sixteenth century (Phase 16).

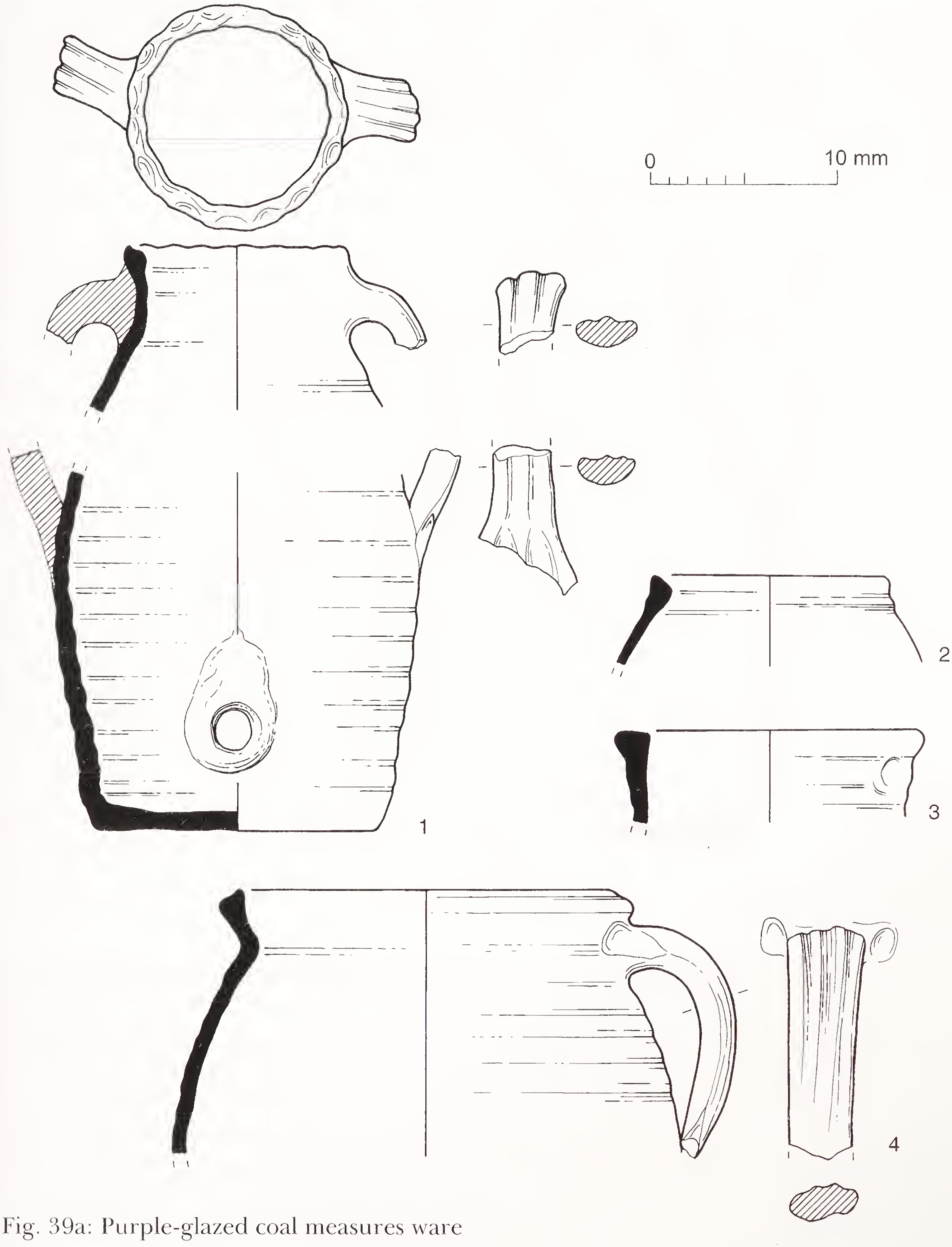

Fig. 39a: Purple-glazed coal measures ware

Discussion

Purple-glazed coal measure fabrics have been noted in Doncaster from the late fourteenth century (Buckland *et al* 1989b, 375). They form part of a widespread

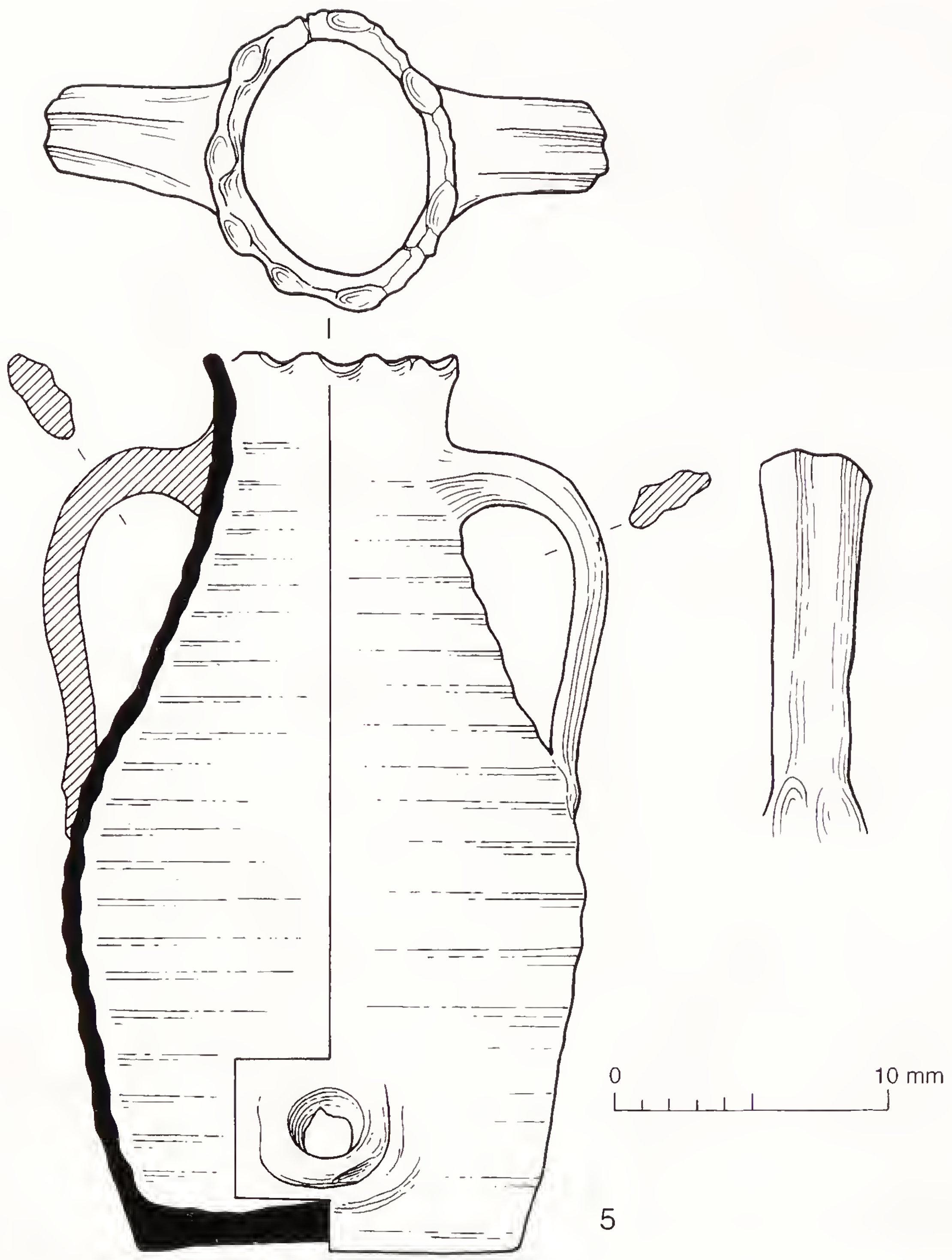

Fig. 39b: Purple-glazed coal measures ware

tradition of purple glazes being used on different fabric types. They have been noted previously in the fourteenth and fifteenth centuries from the Midlands (Midland purple wares), Bawtry (Cumberpatch 1996, 63), Humberside (Watkins 1987, 106), York (Brooks 1987, 160), Newcastle (Ellison 1981) and elsewhere.

Sherds from the range of white wares in the second half of the Low Fisher Gate sequence were selected for analysis in an attempt to understand better the relationship between the Doncaster white wares and other coal measures products. The full report is in the archive but the main points are summarised here.

The selection included sherds identified as coal measures type, both those with a purple glaze (PURPCM) and those with plain lead glaze (WHCM). Visually these appeared similar to sherds from both Firsby and Rawmarsh. In thin-section one of these (WHCM) was described as containing ‘large inclusions of quartz and minor feldspar (probably both derived from a coarse-grained sandstone); fine-grained sandstone; organic white-firing mudstone and inclusionless kaolinitic mudstone.

The groundmass consists of white anisotropic baked clay with abundant well-sorted angular quartz grains and sparse muscovite. These inclusions suggest the presence of Millstone Grit and finer sedimentary rocks which might be of either Millstone Grit or Coal Measures age, and this vessel may come from further west than either Firsby or Rawmarsh' (Vince 2008, 12). A second sample of WHCM had been fired to a very high temperature and is visually similar to Rawmarsh ware. A third sample (PURPCM) was described as containing '… fragments of quartz and red sandstone up to 0.5mm across, vitrified clay/ironstone and abundant large inclusionless kaolinitic mudstone up to 3mm across … consistent with a Rawmarsh source' (*ibid*). The ICPS data for this sample was compared with that from a series of unsourced coal measures white wares from Church Way (thought to be Firsby ware), Hallgate B, Firsby wasters, Rawmarsh wasters and another unsourced white ware. Factor analysis of the ICPS data, however, placed this sample outside the Rawmarsh group, and also outside the group consisting mainly of Firsby and Doncaster products, leading to the conclusion that this was not a Firsby or Doncaster product but might be a Rawmarsh product from another production episode. The second sample (WHCM) correlated with the Firsby/Doncaster group and a second analysis, omitting the Rawmarsh samples, placed it within the Firsby group. Vince concluded that 'It is possible ... that coarse gravel derived mainly from the Millstone Grit crops out at Firsby and was used with the same coal measures white ware clay as was used for other Firsby products, or that the source is actually more distant and the match with Firsby is fortuitous. Only finding sherds of similar fabric at Firsby as wasters would confirm the identification.'

This rather confusing picture shows that not only are these products often difficult to distinguish visually, the thin-section and ICPS analysis sometimes present different results. They also raise the possibility of other production episodes at Rawmarsh (and presumably Firsby) and also of other outcropping and exploitation of these clays.

Purple-glazed moderately fine red earthenware (PURPGL)

Fabric

This is a red earthenware fabric which is much finer than PURPCM and generally not as highly fired, with a fairly open texture and even purple glaze. It does not have the sparse white inclusions noted in the purple-glazed red wares from Bawtry (see Cumberpatch 1996, 63).

Forms

Jugs and cisterns are the most common forms, though occasional jars/cauldrons with everted rims and globular bodies, probably with two opposing handles, occur.

Date

This fabric type is never as common as PURPCM and only accounts for 10% at its peak. It starts later in the sequence in the late fourteenth/early fifteenth century

(Phase 14) and reaches its peak in the mid-sixteenth century (Phase 17), as the coal measures type (PURPCM) is beginning to decline.

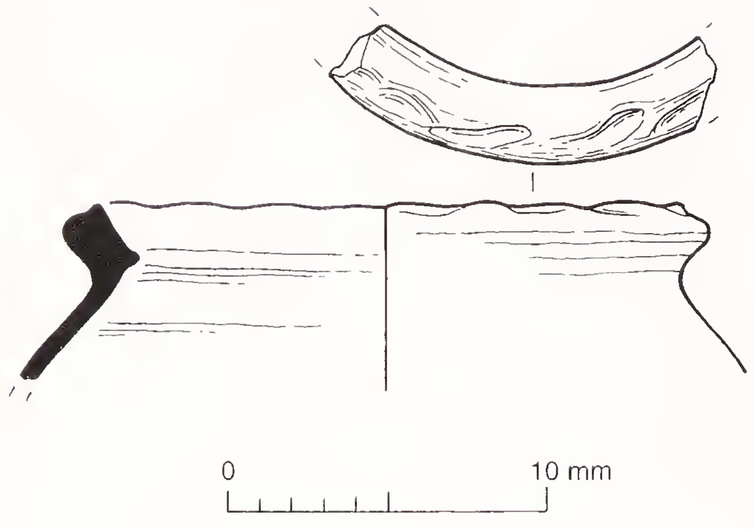

Fig. 40: Purple-glazed red ware

Late medieval oxidised ware (LMOX, LMCOX)

Fabric

Late medieval oxidised ware is a fairly finely gritted, hard sandy fabric which is either lightly oxidised throughout or has a lightly reduced core and internal surface. Glaze can be greenish or brownish-green and can be reduced to give purplish-brown edges. A coarser example (LMCOX) with a purplish glaze was recovered from Phase 17.

Form

Forms include jars and jugs with slightly sagging bases. The coarser example might be from a baluster form.

Date

This type first occurs in the late fifteenth century (Phase 16) when there are only three sherds. In Tenement Y, however, by the mid-sixteenth century (Phase 17) they account for just under 20%, though overall they are much less significant.

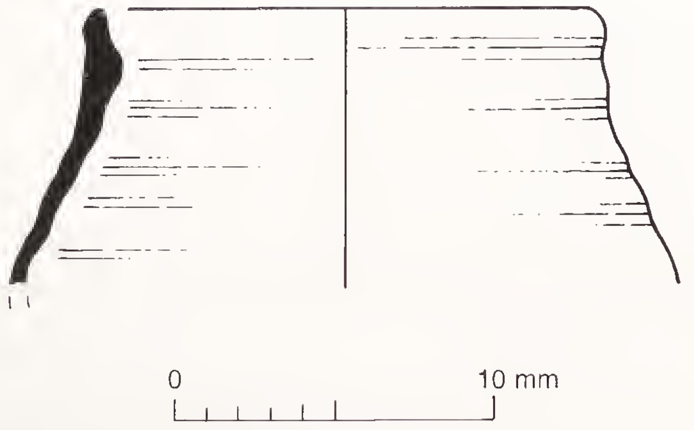

Fig. 41: Late medieval oxidised ware

A sample of this later medieval oxidised ware (LMOX) and a sherd from a finely potted slipware were analysed and, on the basis of the thin-section analysis, were found to contain fragments of quartz sand and sandstone derived from red sandstones of a similar grade to those found in Doncaster (Vince 2008). The groundmass of the late medieval oxidised ware contained thin streaks of white- and red-firing clay, moderate angular quartz sand grains and sparse muscovite. The slipware also used red- and white-firing clays masked by the red slip applied on the surface. Thin-section analysis showed that this was a finer ware with few inclusions over 0.1mm. ICPS data from these vessels, when compared with the Doncaster products, showed a separation and it was suggested that the two vessels were from the same source, but were not local to Doncaster.

Yellow-glazed ware (YELL)

Fabric

Two fabric types were recognised. These include a coarse white-firing fabric with an even yellow glaze, similar to the generic Midlands yellow ware. The fabric is not dissimilar to other South Yorkshire white wares which can also have a yellow glaze, though this is usually lighter and thinner, perhaps relating more to early yellow wares recovered from Bawtry (Cumberpatch 1996, 62). The finer fabric is closer to the white-firing reversed Cistercian ware group (*ibid*, 63)

Forms

Forms include jars, mugs, bowls and a chafing dish (Fig. 42).

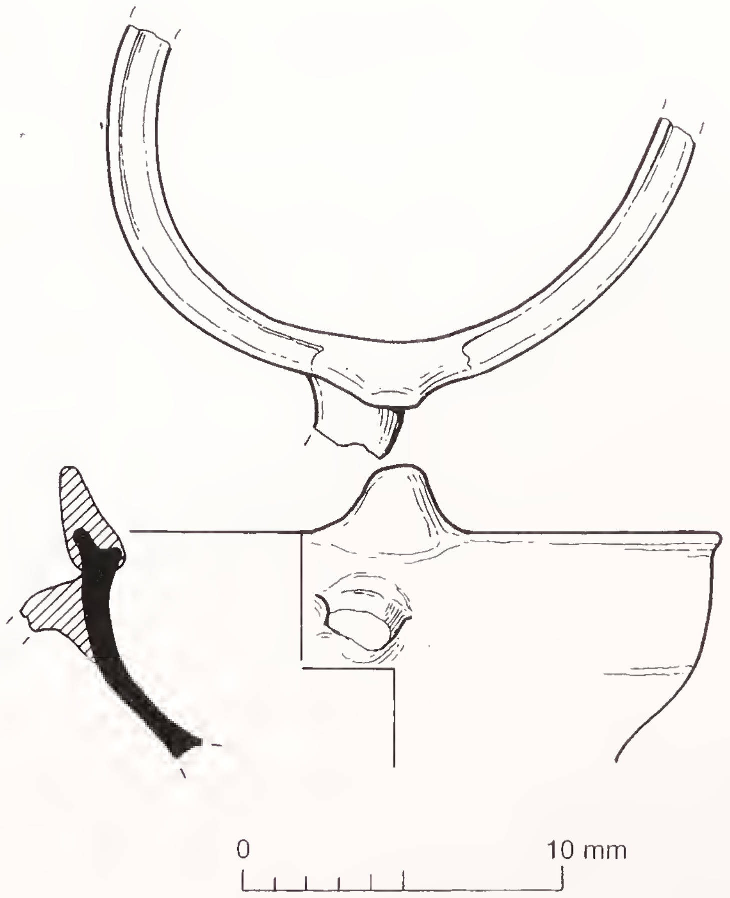

Fig. 42: Yellow-glazed white ware

Date

Two sherds first occur late in the sequence in the mid-fifteenth century (Phase 15) but the type increases throughout the sixteenth and seventeenth centuries, peaking in Phase 19 (eighteenth century).

Brown-glazed ware (BRNGL)

Fabric

Brown-glazed ware is a reddish earthenware with a mid-brown, slightly streaky glaze. A pipkin and a mug are the only forms recognisable (Phase 19). Sherds from previous phases are too small for the form to be identified. One sherd from the flood deposits in Phase 14 may be intrusive, as might the three sherds in a mid-fifteenth-century context (Phase 15). Brown-glazed wares are common in late sixteenth and particularly seventeenth-century deposits across Britain and continue in production throughout the eighteenth and nineteenth centuries. Numerous small potteries in the Don Valley are known (Lawrence 1974) and may be a possible source.

Cistercian wares and Reversed Cistercian wares

Fabric

The most common fabric found at Low Fisher Gate is the highly fired deep purple-brown Cistercian fabric, though under-fired red earthenware types also exist. Glazes are dark brownish-black, sometimes speckled with tiny spots of white clay/slip. The change from this type to the later black-glazed wares was not noted here. Less common are sherds of Reversed Cistercian ware made from a fine white-firing clay, perhaps the same as that used for the plastic decoration on true Cistercian wares; it has a greenish-yellow glaze (Brooks 1987, 160).

Form

Mug forms predominate at Low Fisher Gate. None of the other forms described elsewhere (Brears 1967; Ellison 1981; Moorhouse and Slowikowski 1992), such as candlesticks and bowls, was identified. Several are decorated with applied stamped strips of white clay.

Date

A single intrusive sherd was recovered from a late fourteenth-century context (Phase 11) and further sherds were found in Phase 15. By the mid-sixteenth century (Phase 17), however, Cistercian ware accounts for slightly over 10% of the assemblage after which it decreases. Reversed Cistercian ware is rare at Low Fisher Gate and accounts for less than 2% of the assemblage from the mid-sixteenth century (Phase 17) onwards. Elsewhere in Britain, and in particular Yorkshire, Cistercian wares occur from the late fifteenth century onwards (Brooks 1987, 161; Crossley 1990, 243; Coppack 1986, 75–80).

Black-glazed wares

Fabric

This broad term encompasses a hard fired red fabric with a shiny black glaze which has its origins in the Cistercian ware tradition (Ford 1995, 36–37), but it has a finer more even glaze and no flecks of slip.

Form

Only one mug/tankard is represented by a few sherds.

Source

It is quite probable that this is a local ware, perhaps made in South Yorkshire, for example at Swinton or Rockingham, although such wares were being widely made in Staffordshire, the Midlands and Yorkshire in the late seventeenth and eighteenth centuries (David Barker, pers. comm.).

Date

Black-glazed ware occurs only in Phase 19, dated to the eighteenth century.

Tudor green ware

Fabric

Tudor green ware has a very fine white fabric with few inclusions visible to the naked eye. It has a dullish green even suspension glaze. Both fabric and forms have been described in full by Pearce (Pearce 1992, 4 and 7–45).

Forms

Only a few sherds were recovered, mostly from Phase 18. These include a lobed cup/bowl, while the small fragments from Phase 17 are possibly from a small closed form such as a cup, mug or jug (see Pearce 1992, 23–27 for forms) but are too small for certain identification.

Source

This ware emanates from the Surrey/Hampshire border, and is thought to have been influenced by continental traditions such as those of Beauvais in France and Cologne/Frechen in Germany. Sherds have been found in large quantities in London and the south-east and appear in smaller quantities in Yorkshire and the north-east.

Date

This ware occurs only in Phases 17 and 18 (always less than 1%) at Low Fisher Gate. Its occurrence fits with the accepted dates for production in the late sixteenth and seventeenth centuries (Orton and Pearce 1984).

English stoneware

Two sherds of a light-firing smear-glazed stoneware were recovered from contexts dated to the middle of the sixteenth century or later (Phase 17), where they are probably intrusive.

Post-medieval slipware

Fabric

Locally made slipwares occur in both red- and white-firing clays, though the illustrated example is of a particularly fine white-firing clay, making it hard to distinguish from similar Staffordshire types.

Forms

Dishes and a mug (see Fig. 43) are the only forms recognised here.

Decoration

Undulating wavy lines and feathering or marbling in brown on a yellow lead glaze occur.

Date and source

These wares do not occur at Low Fisher Gate until Phase 19 and are known to have been made locally from the late seventeenth and eighteenth centuries at a number of small rural sites in South Yorkshire, including Midhope near Stocksbridge.

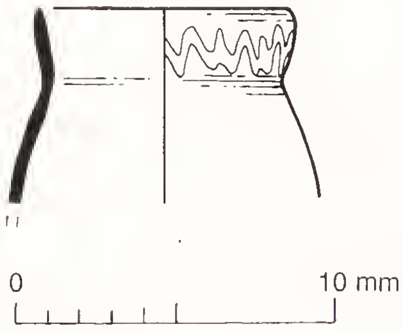

Fig. 43: Slipware

Tin-glazed ware

Fabric and decoration

The matrix is a typical buff soft-firing fabric with matt white tin glaze which has a light blue tinge, over both surfaces, and blue and white finely painted foliate design.

Form

Small dish and flanged dish/soup bowl.

Date

This ware type is represented by only a few sherds. These include part of a small dish, found in a context dated to the early fifteenth century (Phase 14) which must be intrusive. Similarly decorated flanged dishes (see Plates 9–10) occur in a context dated to the eighteenth century (Phase 19) where they are likely to be contemporary.

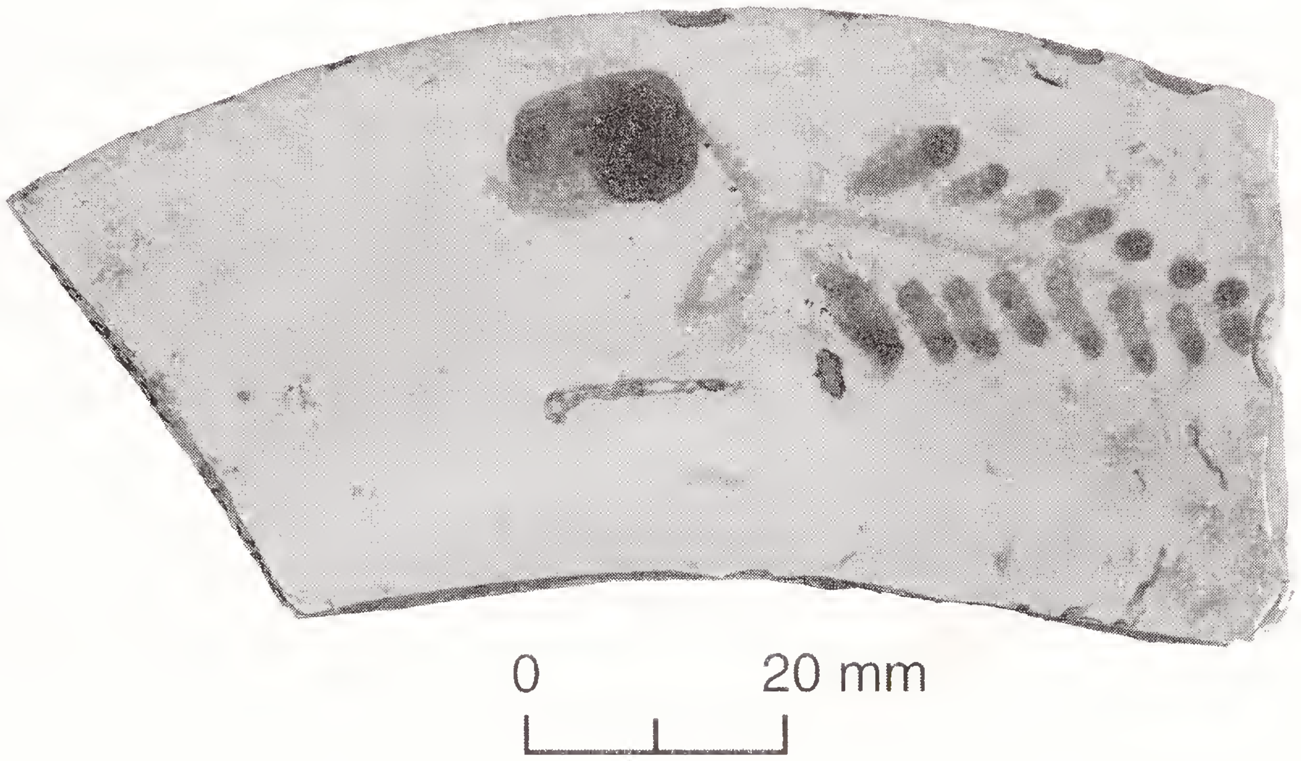

Plate 9: Tin-glazed dish with blue and white foliate design (Phase 19, 1013)

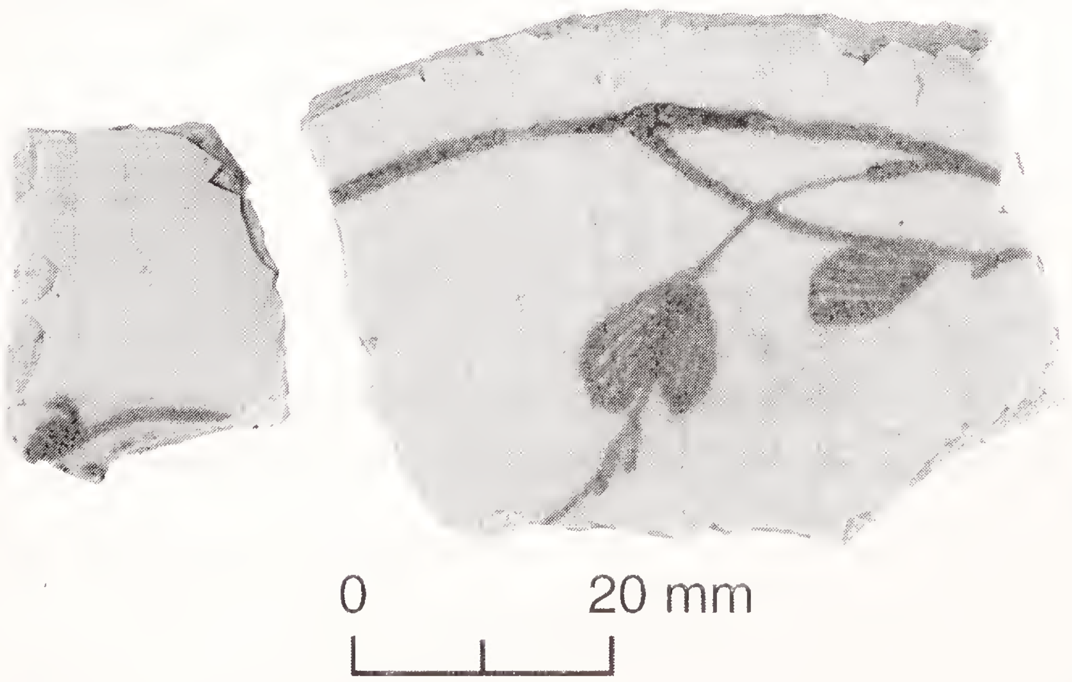

Plate 10: Tin-glazed dish with blue and white foliate design (Phase 19, 1060)

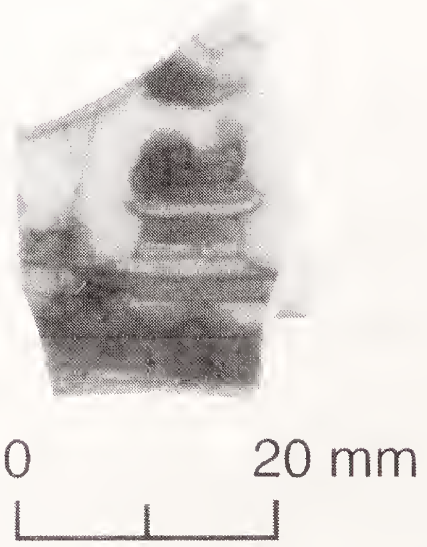

Plate 11: Porcelain dish with blue under-glaze design (Phase 19, 1014)

Post-medieval red wares (PMR)

Fabric

This is a medium to coarsely gritted sandy red earthenware found widely from the seventeenth century. Glazes are greenish-brown and occasionally have an orange tinge.

Form

Jar, dish and bowl (Fig. 44) forms are represented.

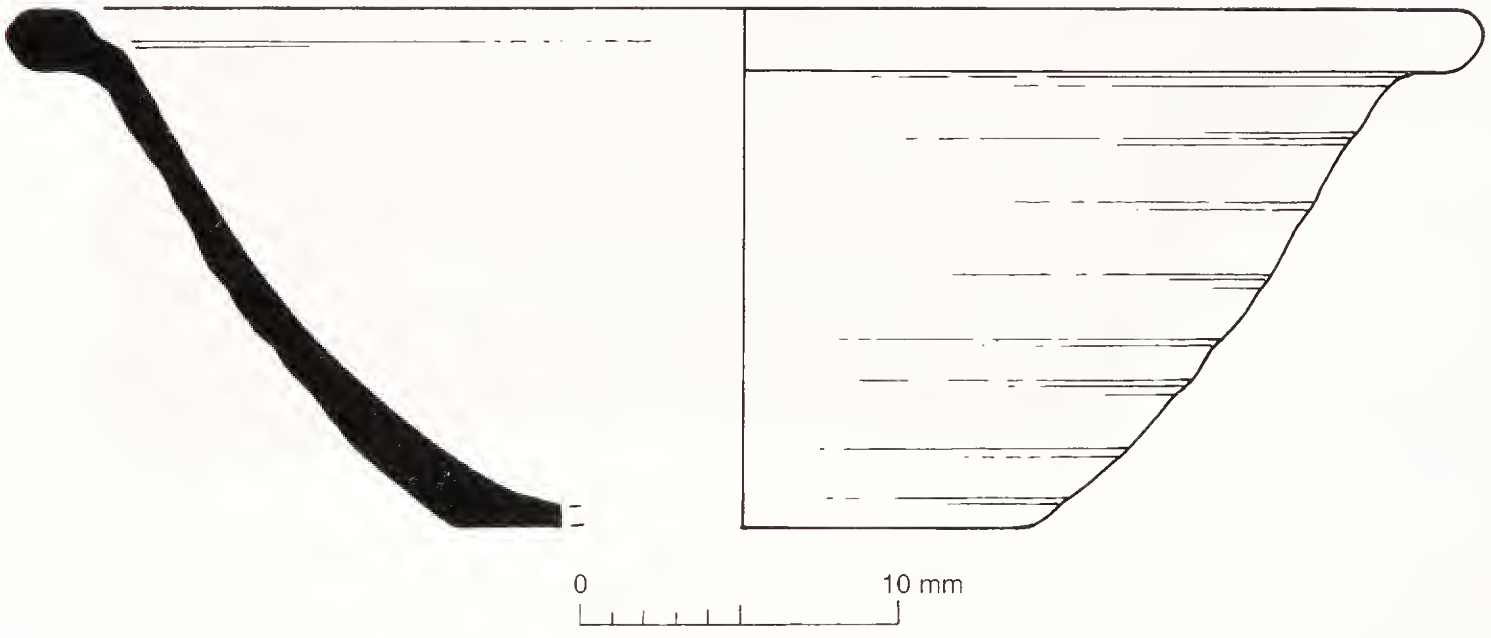

Fig. 44: Post-medieval red sandy ware

Date

At Low Fisher Gate the post-medieval red wares occur in small quantities in Phase 14, where they are likely to be intrusive in the flood deposits. Larger sherds were found in Phases 18 and 19 where they are more likely to be contemporary.

Porcelain

Fabric

Fine porcelain with white glaze with a light blue tinge, a blue under-glaze design and unglazed strip along the bottom of the fine foot-ring of the pedestal base.

Form

Small tea-bowl.

Decoration

The sherd is too small to be certain of the exact pattern but a series of three roughly rectangular/ovoid dark blue areas stacked above each other loosely resemble the pavilion in the 'willow pattern' design.

Date

Only one small sherd has been found and is probably dated to the eighteenth century (Phase 19: Plate 11).

Discussion

The fineness of the form, the glaze and the style of the hand painting suggest a possible Chinese origin.

Foreign imports

A range of German, French and Low Countries products were recovered but never in large quantities. These are of types well known in towns and cities along the eastern part of central England.

Paffrath ware

Fabric

A few sherds of Paffrath or 'blue-grey ware' types, thought to have been produced at a number of centres along the middle Rhine valley (Vince and Jenner 1991, 102–04) were found.

Form

At Fisher Gate the form is the typical ladle with a hooked rod handle (Fig. 45, 1).

Date

Although Paffrath products have been found in pre-Norman contexts, for example in mid-eleventh-century deposits in London (Vince and Jenner 1991, 104), they continue to be found in contexts dated to the late eleventh and early to mid-twelfth century. At Fisher Gate they occur in Phases 3 and 5; the later one is probably residual.

French wares (FR)

A number of sherds with a fine white fabric were identified. While some of these are undoubtedly from French imported vessels, others might be of more local origin as fine white wares have also been identified as South Yorkshire products (A. Vince, pers. comm.). There is also the possibility of confusion with some of the developed Stamford wares

French ware type 1 (FR1)

Fabric

One sherd found in a late twelfth-century context (Phase 3) has a very fine, quite hard fabric with few visible inclusions. It has a smooth internal surface and a slightly pitted, thin, watery glaze with green copper speckles. This is probably a jug sherd and might be a French import or an unusual Stamford product.

French ware type 2 (FR2)

Sherds classed as French ware type 2 include a very fine, smooth, white fabric with no visible inclusions and a thin, mottled dull green and yellow glaze. These are like Saintonge wares in the fineness of the fabric but equally could be another North French type (see Vince and Jenner 1991). Forms, where they are recognisable, include a sagging pitcher base (Phase 3) and a high, wide-shouldered jug with two horizontal incised marks along the neck/shoulder join. One late twelfth-century example has a similar fabric with a thin matt yellow glaze (Phase 3). These sherds are never common but make their first appearance in the late twelfth century (Phase 3) and appear intermittently in subsequent phases.

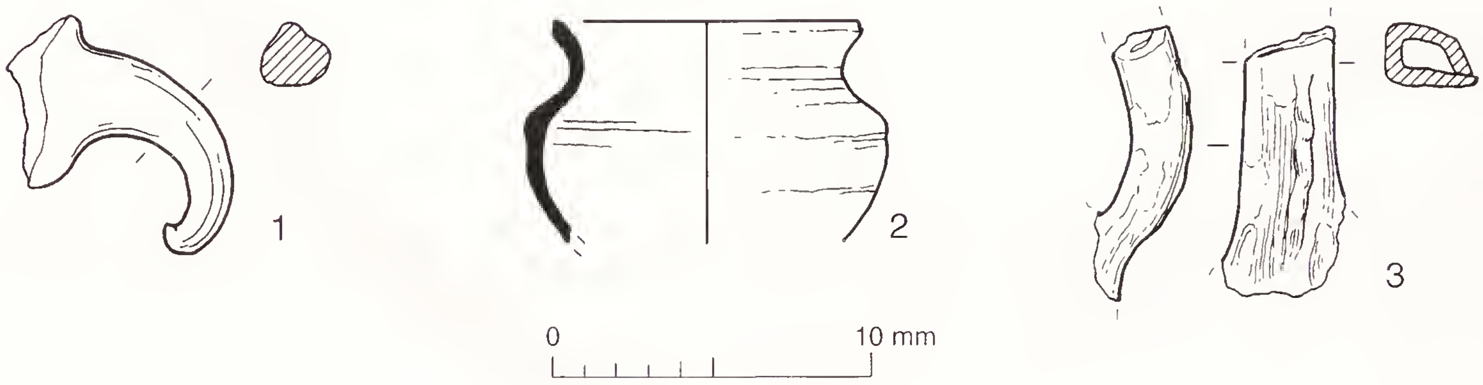

Fig. 45: Imported ware

French ware type 3 (FR3)/Rouen ware

Fabric

Sherds of Rouen ware were identified. This is another fine white sandy fabric with a slightly hackly break and no visible inclusions, but not as smooth and fine as FR1 and 2. Sherds of a jug with pedestal base and ribbed rim comprised one of the few identifiable forms, as well as the typical wheel-thrown handle (Fig. 45, 3).

Date

Rouen wares are never common but they occur in late twelfth/early thirteenth-century deposits (Phase 4) through into the late thirteenth century (Phase 6) and decrease by the mid- to late fourteenth century (Phase 11), by which time sherds are likely to be residual.

Saintonge wares (SAIN)

Sherds of recognisable Saintonge jugs found at Low Fisher Gate are almost entirely of the green-glazed type. They begin their currency in Phase 6, after the introduction of the Rouen types. Saintogne ware is most common in Phase 7, after which it decreases in quantity throughout the sequence.

Martincamp stoneware

Fabric

Hurst *et al* (1986, 102–04) outline three Martincamp stoneware fabrics ranging from white to red and softer to harder fired. The example from Low Fisher Gate is a harder-fired, reddish-brown stoneware and as such is the later type III variety.

Form

Type III flasks are more rounded than their earlier counterparts, though they both share the same type of long narrow neck, which is luted onto the side of the two thrown and joined halves of the body (Hurst *et al* 1986, 103, fig. 47, no. 143).

Date

This type III flask was found in Phase 19 where it is presumed to be residual. Hurst dates this type to the seventeenth century when it is most commonly found on sites in Britain (Hurst *et al* 1986, 104).

German stonewares

Fabric and form

The small number of German stoneware sherds are mostly of the Langerwehe/Raeren and later Frechen types. Forms include the typical mugs and jugs as well as occasional jars.

Date

The importation of these stoneware types appears to be at its peak in Britain around the sixteenth century, which is consistent with the pattern at Low Fisher Gate. There are six Langerwehe/Raeren stoneware sherds and one sherd of a possible Siegburg mug present by the late fifteenth century (Phase 16) and this increases slightly (twenty-six sherds) by the mid-sixteenth century (Phase 17). Later forms include Langerwehe and Frechen bartman krugs. By Phase 19 only Frechen types were found, a typical pattern for British sites from 1550 to 1700 (Gaimster 1997, 53–55)

Low Countries red earthenware

Low Countries red ware cooking vessels, including jars and bowls, were recovered in small quantities (less than 1%) from fourteenth-century and later deposits. The earliest occurrence is from an early fourteenth-century context (Phase 7) where it may be intrusive and there are further examples from the mid-fourteenth century to the early sixteenth century (Phases 8–16), after which sherds are likely to be residual (Hurst *et al* 1986, 130).

Unclassified wares

Some sherds were either too small, abraded or undiagnostic to be accurately classified. Others were unrecognised. These have been listed in the archive as Fabric '75' (unclassified grey wares) and Fabric '99' (other unclassified wares) and are described there. In the bar charts they have been included in the 'other' column, together with wares which at any one period were represented by less than 1%.

CONCLUSIONS

The assemblage from Low Fisher Gate has served to confirm the broad picture of ceramic supply and usage in medieval Doncaster. It seems clear that the sequence starts after the Norman Conquest and is then unbroken until the sixteenth/early seventeenth century, after which the area is largely gardens. The assemblage charts the origins of the Hallgate industries in the various types of gritty and splashed wares of the twelfth century and its evolution until it reaches a position of overall dominance. The evidence from Low Fisher Gate suggests that Hallgate products, notably Hallgate A, provide most of the town's pottery through the thirteenth and well into the fourteenth century. The evidence from the site also seems to suggest that production might extend into the middle decades of the fourteenth century and possibly beyond. Precise dating is hampered by the lack of independent dating evidence and the blurring caused by the redeposition of material. There can be no question, however, that the Hallgate industry was important throughout most of the period of the site's occupancy. The presence of Hallgate-type wasters or seconds on the site raises the possibility that further evidence of production may yet be discovered in that area of Doncaster. Their occurrence, without any evidence of production at Low Fisher Gate itself, however, suggests that there have been episodes of importation of material for levelling or the dumping of material on the slope down to the river.

The post-Hallgate pottery is dominated by the coal measures material and the analyses undertaken have shown a complicated picture of visually similar, but geologically and chemically distinct, wares. While sources must have included Firsby and Rawmarsh, analysis suggests that there might have been other production centres using the coal measures clays and/or different episodes of production at these sites.

The pottery shows that although Doncaster products predominate, material from other areas was circulating in the town. These include examples from Lincolnshire, elsewhere in Yorkshire and beyond. Foreign imports are always a minor element in the assemblage but include French, Low Countries and Rhenish products. The regional and continental wares help to place the town in its wider context and provide new evidence for understanding the network of contacts and influences that the town enjoyed. These influences are reflected in the forms and styles of decoration on the Doncaster ceramics as the local potters draw on common repertoires of vessel shape and fashion to satisfy the demands of the local urban population.

SUMMARY OF THE EXCAVATIONS AND POTTERY

The excavations have provided a valuable insight into the development of a small portion of Doncaster over a prolonged period. The presence of Roman activity on the site was hinted at by borehole results, the position of which might suggest a Roman waterfront in the area; this clearly merits investigation should any adjacent land be redeveloped. As the main excavations did not reach sufficient depth to uncover any remains from the post-Roman period to the time of the Norman Conquest it has not helped to elucidate the development of Doncaster during this era. The site did, however, provide an excellent sequence of deposits spanning the later medieval and post-medieval periods.

The site showed the value of large-scale environmental sampling and analysis despite seemingly limited potential (the majority of the deposits exhibited poor organic preservation). The environmental samples suggested that the site was probably not domestic in character, and that the use of the site was remarkably constant throughout the period investigated. The presence of saw-sedge, almost certainly as roofing material, together with evidence of the importation of heathland turf for use as either roofing material or as fuel was of particular interest, and would almost certainly have been missed had a less extensive sampling strategy been adopted.

The site was probably largely industrial or commercial, and evidence for a number of trades and commercial activities was present at various stages of the site's history, including the loading/offloading of boats, corn drying, iron smithing, lead-alloy working, cordwaining, white-leather production, boat building or repair, the large-scale butchery of animals and use of part of the site as a stockyard. Despite the evidence for these trades taking place on the site, it was not possible to state firmly the precise functions of any of the individual buildings uncovered.

Although the site might not have been primarily domestic in function, the pottery assemblage is of a domestic character. The sequence shows how the proliferation of small pottery industries in the twelfth century gradually evolve into major production centres which dominate the assemblage through the medieval period. The decline of production in the town marks a change in the ceramic assemblage as other types, whose source is outside the town, ultimately replace the Doncaster Hallgate industries. Regional and foreign material, which appears in limited quantities throughout the sequence, helps to place the town in a wider context of contact and influence.

GLOSSARY OF FABRICS

Pottery abbreviations, used in quantification tables and archive, expanded

ROMAN

R	Roman residual

ANGLO-SCANDINAVIAN/EARLY MEDIEVAL

Local

SPLA	Hallgate-type splashed ware (includes SPL1, 3, 6, 7, 8 and SPL1/HALLA)
SPLB	(includes SPL2)
SPLC	Hallgate B type (includes SPL4)

Regional

Lincolnshire	
EMHM	Early medieval handmade ware
GRIM THET	Grimston-Thetford ware
STAM	Stamford generic
STGL	Stamford glazed
STUNGL	Stamford unglazed ware
THET	Thetford-type ware
TWTYP	Torksey ware
East Yorkshire	
SPLD	Beverley type (includes SPL5)
Other	
EG1	Early glazed ware

Imports

Low Countries	
PAF	Paffrath-type grey ware

MEDIEVAL

Local wares

BUFGLZ	Buff glazed ware
BUGR	Buff gritty ware
BWSN	Buff white sandy ware
FNOX	Fine oxidised ware (see LOND, BEV and SCAR)
FRCD	Fine reduced ware, probably over-fired Hallgate A
GW	Gritty ware

HALLA	Hallgate A
HALLB	Hallgate B
HALLC	Hallgate C
OXGW	Oxidised gritty ware
OXSN	Oxidised sandy ware
RDCD	Reduced ware
RDGW	Reduced gritty ware
SMOX	Sandy moderately gritted oxidised ware
SRCD	Sandy reduced ware (probably over-fired Hallgate A)
WAST	Wasters/seconds, mainly Hallgate A fabric (SEC/WAST)
WHGW	White gritty ware
WHSN	White sandy ware

Regional wares

East Yorkshire

BEV	Beverley
EBEV	Early and later Beverley-type ware
HUM	Humber
HUM/A	Hallgate A or Humber ware
SANRED	Sandy red ware
SCAR	Scarborough ware
SCARI	Scarborough-type ware
SCARII	Scarborough-type ware

Lincolnshire

DEVS	Developed Stamford ware
LFS	Lincoln fine-shelled ware
LEMS	Local early medieval shelly ware
NLST	North Lincolnshire shelly ware
POTT	Potterhanworth-type ware
SHELL1–3	Shelly ware generic term

North Yorkshire

BRAND	Brandsby-type ware
EYGW	Early York glazed ware
YGW	York glazed ware
YGWW	York glazed fine white ware

Tees Valley

TEES	Tees Valley-type ware (WHSLP)

London

LOND	London-type ware

Miscellaneous

99	generic term for glazed wares
75	generic term for grey wares (GREY)

LATE MEDIEVAL AND POST-MEDIEVAL

BRNGL	Brown-glazed ware
BLKGL	Black-glazed ware
CIST	Cistercian ware
CM	Coal measure ware
ENGSTN	English stoneware
LATEA	Late Hallgate A type
LMOX	Late medieval oxidised moderately gritted ware
LMCOX	Late medieval coarsely gritted oxidised ware
LMRDCD	Late medieval reduced fabric
PMR	Post-medieval red ware
PORC	Porcelain
PURPCM	Purple-glazed coal measure type
PURPGL	Purple-glazed red earthenware
REVCIST	Reversed Cistercian
SLIP	Slipwares
TGW	Tin-glazed ware
TUDG	Tudor green
WHCM	White coal measure ware
YELL	Yellow glaze

Imports

Low Countries	
LCRW	Low Countries red earthenware
France	
FR	French
FR1	French/local South Yorkshire soft very fine white ware
FR2	French/local South Yorkshire slightly harder very fine, sandier white ware
MARTIN	Martincamp
ROU	Rouen-type ware
SAIM	Saintonge mottled green-glazed ware
SAIN	Saintonge green-glazed ware
Germany	
FRECH	Frechen
GS	German stoneware
LANGREHE	Langerwehe
RAER	Raeren
SIEG	Siegburg

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LIME KILNS IN THE CENTRAL PENNINES: RESULTS OF A FIELD SURVEY IN THE YORKSHIRE DALES AND CONTIGUOUS AREAS OF NORTH AND WEST YORKSHIRE

By David Johnson

Nearly 1500 lime kilns have been located and fully surveyed within the Yorkshire Dales National Park and surrounding parishes over the past fifteen years. It is arguably the most comprehensive lime kiln survey ever undertaken in this country. The article begins with a historical review of lime kilns and lime usage within the area before outlining the methodology employed in the field survey and analysing the results.

INTRODUCTION

In an article on lime kilns in the Welsh Marches, its author began by emphasising the importance that lime had once had in this country, by noting that the 'industry has been neglected locally and nationally', and by appealing for surveys to be carried out at county level (Bick 1984, 85). Since then various researchers have taken up the challenge by publishing, in article or booklet form, county- or district-wide inventories of what now remains of once numerous kilns (see, for example, Brock 1987, Cleasby 1995, Isham 2000, Minchinton 1984, Robertson 1999, and Barker 2008).

This writer has undertaken field surveys across most parishes within the Yorkshire Dales National Park as well as across Craven District outside the park, along the Swale and Ure to the east of the park, and in Lower Wharfedale and Lower Airedale as far downstream as Otley and Bingley respectively (Fig.1) [1]. Table 1 shows the breakdown of parishes within the survey related to the number of kilns identified. In addition to the field survey, the writer has carried out parallel archival and documentary research into various aspects of lime burning, which are beyond the scope of the present article (see Johnson 2008a; forthcoming a and b); and has organised archaeological excavations into early clamp lime kilns in Craven, a form of kiln not discussed in this paper (see Johnson 2006; 2008a and b). The role of lime in agricultural land improvement in the Central Pennines, between the medieval period and about 1900, is currently being written up as a doctoral thesis.

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[1] In addition similar surveys have been undertaken by this writer in thirty-one parishes in south-east Cumbria and Lancashire adjacent to North Yorkshire, bringing the total number of sites to nearly 1800.

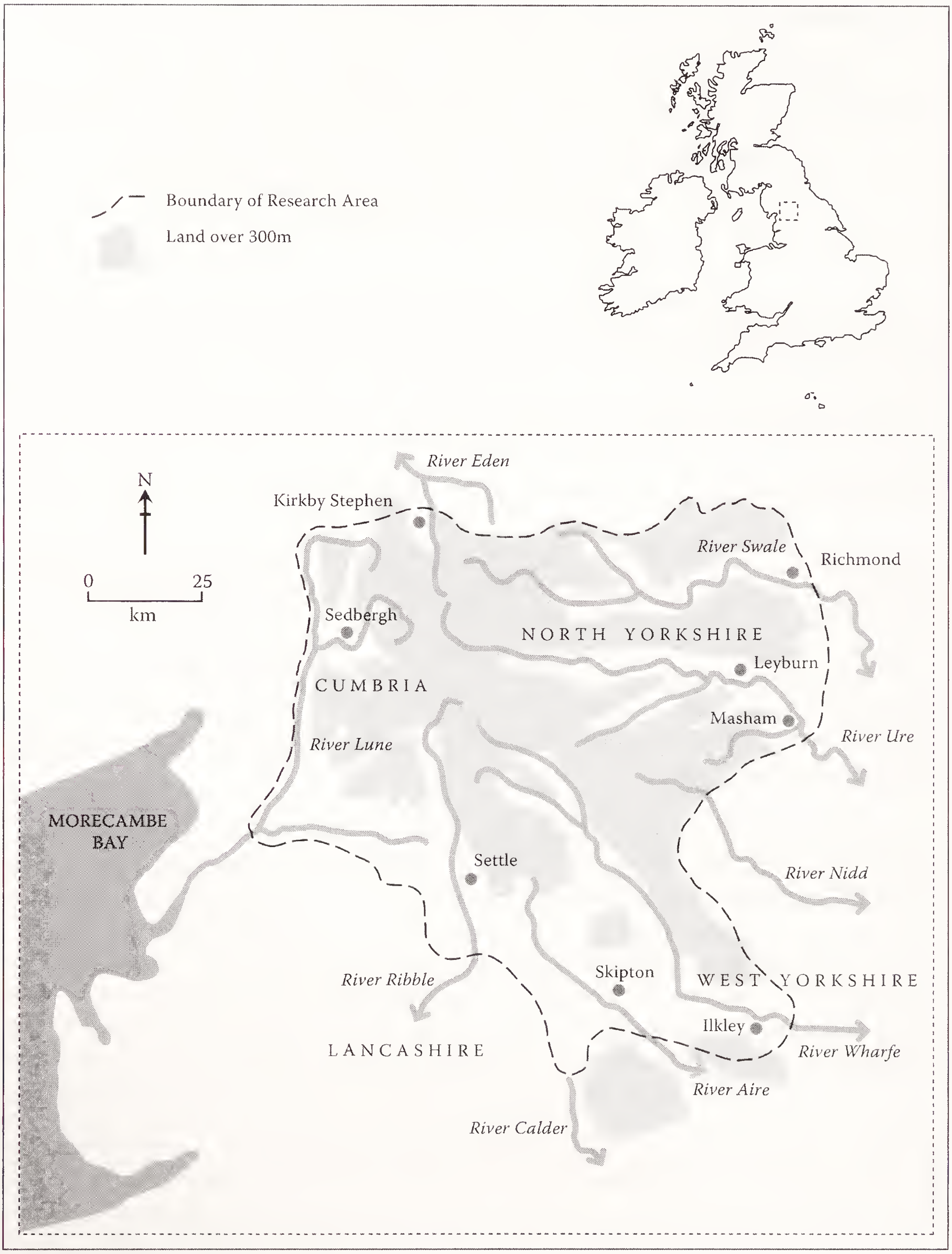

Fig.1: Geographical extent of the research area

Area	No. of Parishes	No. of kiln Sites
Upper Wharfedale and tributary valleys	23	208
Lower Wharfedale	14	40
Craven (excl. Wharfedale) and Airedale	43	318
Wensleydale and tributary valleys	21	355
Swaledale and tributary valleys	10	189
Wensleydale and Swaledale outside the YDNP	38	135
Cumbria within YDNP	3	221
TOTAL	**152**	**1466**

Table 1: The relationship between civil parishes and the number of lime kiln sites

HISTORICAL CONTEXT

Lime was produced in Britain under Roman occupation and several kilns from this period have been excavated (Challands 1976; Dix 1979; 1982; Tomson and McIlwaine 1992-93). It is probable that every masonry or brick building would have been associated with an on-site lime kiln, and there is evidence that lime was applied on the land in the Roman Empire, though none exists for Yorkshire (Oates 1998, 3). There would have been a hiatus in lime burning after the Roman withdrawal as the military, villa and urban market-orientated economy slowly decayed. Though not a single confirmed Anglo-Saxon lime kiln has been located in the county (or probably in the country), no stone-built church or monastic complex could have been contemplated without a lime kiln to produce the necessary lime mortar and limewash.

Elsewhere in the country archaeological excavations have revealed useful detail about medieval lime kilns, especially those associated with the construction or repair of castles, whereas for Yorkshire we must largely rely on documentary sources. State papers provide a wealth of information in this respect. For example, there was a series of writs concerning York castle in the *Liberate* Rolls during the reign of Henry III: in April 1245 the constable of Pontefract Castle was required to have two lime kilns (*rogos*) made for works at York, wherever convenient and to 'carry the lime to the water, to be carried on to York Castle by the sheriff' (Cal. *Lib.* Rolls 29 Henry III), and ten years later the sheriff of York was ordered to repair the castle 'without delay against the coming winter, and to make rubble of stone and lime' for the same (Cal. *Lib.* Rolls 39 Henry III). In 1361 the sheriff of York was issued with a writ to report on the decayed state of Scarborough Castle, one curtain wall of which had fallen into the sea (Cal. Inquis. Misc. 35 Edward III). Emergency repairs had already been carried out using lime mortar but much more was needed.

These are inevitably rather cursory entries in the rolls, providing the minimum of detail, but several medieval agreements relevant to the research area provide much of interest. One such is the indenture drawn up between Sir Richard Lescrope and John Lewyn, master mason, for the building of Bolton Castle in Wensleydale in 1378 by which Lewyn was to supply the necessary lime at his own cost (NYCRO, ZBO Bolton). Catterick church was dismantled and reconstructed in 1412 with the indenture here placing the burden of securing the lime on the patrons rather than the mason (NYCRO, ZRL 1/20). William de Burgh, the chief patron, was later to be party to an agreement to build a new stone bridge at Catterick, though this time the masons were bound to 'gett lymstane And birne itte And care itt And make yair lymkilns of yair own cost' (NYCRO, ZRL 1/23).

A Fountains Abbey lease from 1517 concerned farmland in Threshfield in Wharfedale and among the parcels of land listed was 'half a rodde lyinge north and sowth upon the lyme kylne' above Chapel House (Michelmore 1981, 63). Whether this kiln was producing lime for mortar or for application on the land is a matter of conjecture, but this is one of the earliest confirmed located references to a lime kiln within the Central Pennines.

During the sixteenth century kilns were burning lime for soil improvement in the area, though it is not possible to tie down when and where this practice began, and one can only speculate that knowledge of the benefits of liming might have slowly spread from further south by contact between far-sighted landowners. Recent archaeological excavations of lime kilns in Craven have supplied late sixteenth- to early seventeenth- century dates (Johnson 2006).

Current research by this writer is showing that the early use of lime on the land – and thus the burning of lime – was much more widespread in the area than has generally been appreciated, but it remains a fact that there was a burgeoning in the number of kilns during the eighteenth century, many of them associated with the process of parliamentary enclosure. Though there were a number of catalysts for enclosure, many schemes were motivated by a desire to improve existing common pastures or to bring moorland waste into production. Draining and paring and burning (scraping off and burning the turf layer to produce potash) were integral to most land improvements associated with enclosure, and the role of lime should not be underestimated.

From the middle of the nineteenth century the dominant position of lime as the prime soil input came under pressure from various directions. In agriculture alternative, and cheaper, soil improvers like imported guano and chemical inputs became readily available; while pulverised limestone could be produced more quickly and with fewer environmental negatives than burnt lime. A severe depression in farming was mirrored by significant reductions in the market for lime. This was felt most between 1879 and 1896, but effectively lasted until 1937 when the government introduced the Land Fertility Scheme with its substantial subsidies on agricultural lime (Johnson 2002, 172). Likewise, the development of Portland cement, first patented by Joseph Aspdin, a Leeds bricklayer, in 1824 (patent number 5022/1824) slowly whittled away at the market prominence previously enjoyed by lime mortar. The combined effect of these developments led to the abandonment of most field and small-scale commercial kilns by the end of the nineteenth century. A few did struggle on and were revived after 1937 but an operational field kiln was by then an extremely rare phenomenon.

HISTORICAL DESCRIPTIONS OF LIME KILNS

Those involved with lime production for use in agriculture, whether as landowners or lime burners, were keen to maximise their profits by improving the efficiency of their operations. This generated frequent correspondence in contemporary journals concerning what constituted the best kiln design, and prizes were offered for more efficient ideas. In 1801, for example, Alexander Dirom was the recipient of a prize from the Highland and Agricultural Society of Scotland for a twin-kiln plan actually invented by a Mr Jamieson (Anon 1808). Dirom's/Jamieson's kiln was advanced in concept for its time, having a firebrick lining and a system of iron dampers and doors (Dirom 1801).

In 1802 John Dodgshon, of Bewcastle in Cumberland, had perfected a way of using peat in existing kilns that, according to his description, were very traditional in form, tapering in from top to bottom, with a bowl rim diameter of 2.3 m, a basal diameter of 1.7 m and a bowl depth of almost 5 m. An encyclopaedia of manufacturing, compiled by Rees and published in 1820, described in great detail kilns that fitted each of Dirom's and Dogshon's plans but downplayed a new design that had been taken up again in Scotland (Cossons 1972, 290-91). The landowner of the Closeburn estate in central Scotland had adapted Rees's model and came up with something altogether better in terms of fuel efficiency and improved quality of lime (Stuart Menteath 1831 and Duffus 1844). His kiln was on a grander scale and had a revolutionary characteristic in the form of the bowl rim. Most previous designs (see also Maxwell 1757 and Marshall 1788) had a bowl rim like that of a champagne glass, in other words the top of the bowl was its widest point. Rees and Stuart Menteath favoured a bowl cross-section more akin to an egg, the cross-section being more elliptical, so that rising hot air was circulated back into the bowl rather than escaping out of the top (Fig.2). This design was also a prize winner for the Highland and Agricultural Society. It was claimed to be three times more fuel-efficient than traditional designs. Despite this many kilns continued to be constructed in the old style (see Wallace 1837 and Wilson 1849).

An important article published shortly before farming was to be plunged into its severe depression drew a clear distinction between 'common perpetual' and 'intermittent' kilns (Turner 1871). The former were fired up and intended for continuous use over a period of weeks or months – or with large commercial operations possibly for many years – as fresh stone and fuel were constantly added at

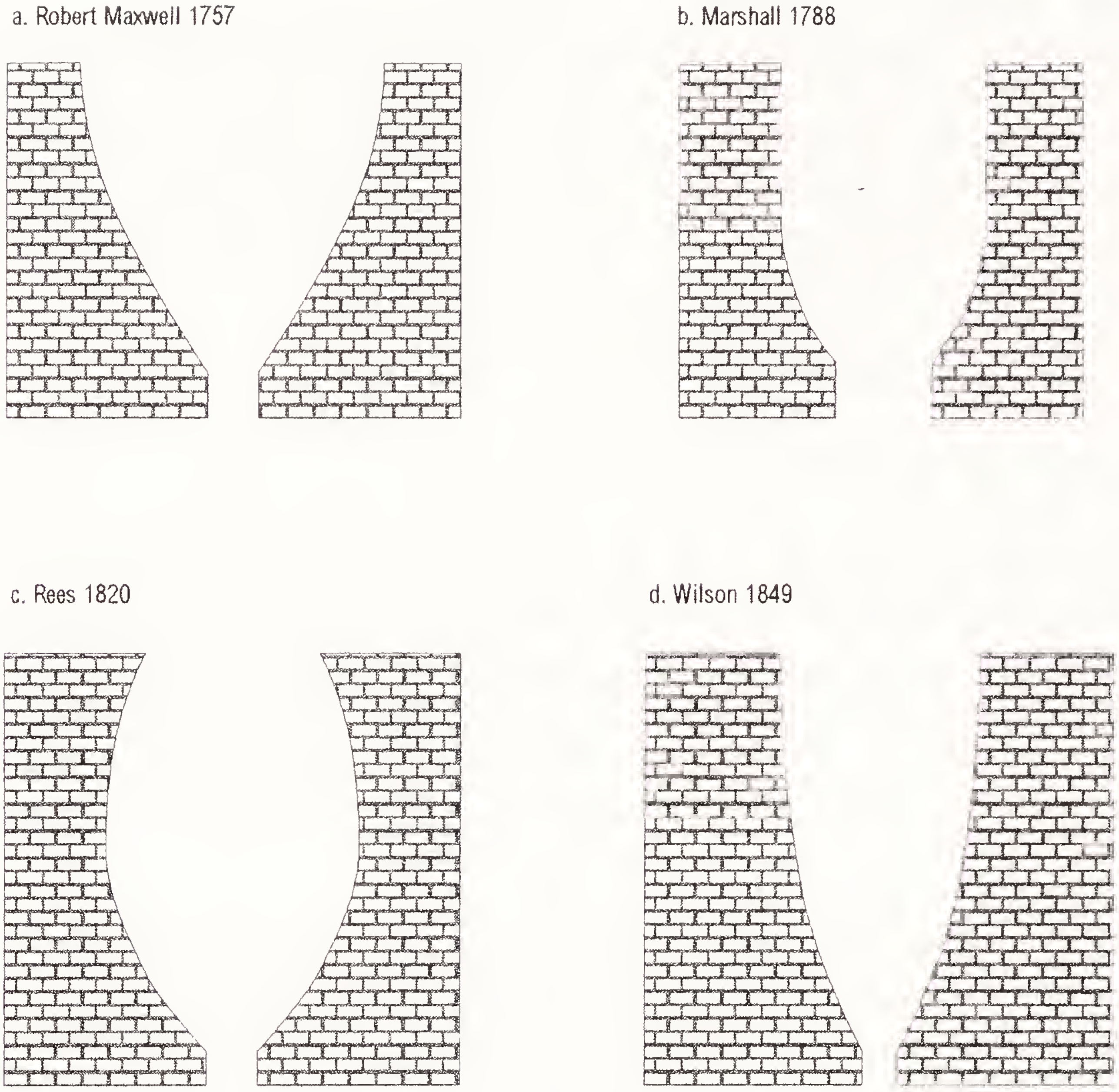

Fig.2: Lime kiln cross-sections, not to scale

the bowl rim and burnt lime was drawn out of the bottom. The latter were filled up and operated by what would now be termed batch production: the kiln fill was burned through and emptied in its entirety, then refilled from scratch again. Each had its advantages and drawbacks. Continuously worked kilns retained their heat so the kiln masonry never cooled down; this made these kilns very fuel- and labour-efficient but the quality of lime produced was variable. Intermittent kilns needed to be warmed up first over several days, using up a lot of fuel, and they had to be left for several days to cool down sufficiently for the lime to be drawn. In addition they were more labour-intensive and thus more costly to operate.

There has been much discussion in recent years among industrial archaeologists keen to formulate a typology of kilns based on whether they were continuous or intermittent (see Stanier 1995, 3; Starmer 1995, 2; Leach 1999, 5-7; and Trueman 2000, 4-5), but this writer is of the opinion that such discussion is largely fruitless as there is now no guaranteed way of determining how most kilns were operated.

VERNACULAR USES OF LIME

Setting aside a whole range of large-scale urban and industrial markets for lime, it is convenient to assign rural uses into three broad categories – agricultural, trade and building. Until the late nineteenth century nearly two thirds of all lime went into farming, though by 1959 this had dropped to only 15 per cent as cheaper and less environmentally harmful substitutes became readily available (Stowell 1963, 29). From the medieval period until the 1960s quicklime (*ie* lime from the kiln) was spread as top dressing on grassland or mixed into the soil and allowed to slake. This aspect of lime usage in the Dales and surrounding areas is the focus of this writer's main current research programme, and will be reported on in due course.

Lime has often been described as a fertiliser, but this is erroneous. Rather, it acts as a catalyst and performs a number of roles within the topsoil, whether mixed in or top dressed. Fundamental to this is its propensity to facilitate the breaking up of clods into smaller particles, especially in heavy soils, increasing the proportion of pores in the soil by a process known as flocculation. This permits rainwater to infiltrate through the soil more readily, leaving it much better drained. Having more pores also means that the soil is better aerated and solar energy can penetrate more deeply, thereby raising soil temperature. The result of these changes is that worm and bacterial activity is stimulated, boosting the degree of nutrient cycling within the soil. In turn, the impact of this on plant growth (grass or arable crops) is readily apparent if one compares an untreated with a treated field. Liming also promotes the release of iron and aluminium compounds within the subsoil, which directly causes the release of phosphates and makes them available for plant uptake.

Liming was also carried out to prevent or treat a variety of stock diseases in the days before chemical treatments (see, for example, Brown 1759, 29): these included red water, staggers and lactation tetany. At an altogether different level, 'dew' ponds were built where surface water was not available. To discourage worm activity from turning the base into a sieve, many ponds were given a quicklime lining.

A range of rural trades across the Dales relied on lime as an essential ingredient in the manufacturing process. Hides had to be soaked for up to a week in a lime water mix to soften them and ease the removal of the outer layer during the tanning process; dye and textile bleaching works also required lime; and it was used in the pulping process by local small-scale paper makers.

Until the introduction of cement in the later nineteenth century all masonry buildings relied on lime. Much of this was used as mortar or as external render or harl but it also had a range of other vernacular uses including internal limewash and whitewash. In earlier building forms wattle and daub walls were often coated in lime or a mix of lime and cow dung, the dung acting as a binding agent. More obscurely, perhaps, its use is also recorded as a sealing base layer for painting wall murals, in which case slaked lime was mixed with crumbled cheese (Slinger *et al.* 1956, 363).

METHODOLOGY[2]

The initial stage in the field survey was to obtain a full listing of known lime kilns from the Sites and Monuments Record (SMR, now Historic Environment Record – HER) maintained by the National Park Authority or, outside the park, by the County Councils. These sites were transferred to current 1:25,000 Ordnance Survey maps. The vast majority of kilns that existed at the time of the first official surveys – the 1840s or 1850s – had been labelled either as 'Limekilns' or 'Old Limekilns' on the sheets of the First Edition six inch series, and these maps were cross-checked against SMR listings.

Every enclosure map within the research area was examined, as were all tithe apportionment maps within North Craven, along with all estate or mining maps that could be located in archives and county record offices. Many of these did not mark kilns, but the significant proportion that did made the exercise worthwhile in identifying kilns not marked on First Edition maps, and it also helped inform the relative dating of sites. As part of the wider research programme into agricultural lime usage in and around the Central Pennines, as many archival references to lime kilns as possible were noted and added to the overall database. It has to be said, though, that a number of kiln sites were not found by desk-based searches but by field surveying, reports from individuals or, indeed, by pure chance in the field.

Compiling the database and undertaking field surveying were organised on a parish-by-parish basis, starting with the area around Settle in 1995, moving to the rest of North Craven, then South Craven, and progressively further afield, with the programme being essentially completed during 2008. In total 152 civil parishes were surveyed (146 by this writer), of which 73 lie within the national park; 1446 kiln sites were visited (1379 by this writer), 963 of which lie within the North Yorkshire section of the national park. Figure 3 shows all sites (totalling 1649) across this writer's entire research area within and without the National Park.

A dedicated and comprehensive field survey form had been drawn up for the early 1990s surveys by Robert White, Senior Conservation Archaeologist for the Yorkshire Dales National Park Authority, and it was used in a slightly modified form for all sites visited by this writer. All completed forms related to sites within

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[2] While this writer has surveyed most parishes within the Yorkshire Dales National Park, due acknowledgement is made to surveys carried out in the early to mid 1990s by members of the Sedbergh and District History Society and by various individuals, namely the late Brenda Capstick, Janet and Robert Harker, David McMahon, Mark Simpson, Jack Webster and D. L. Woolley. These data are all available on the YDNPA HER.

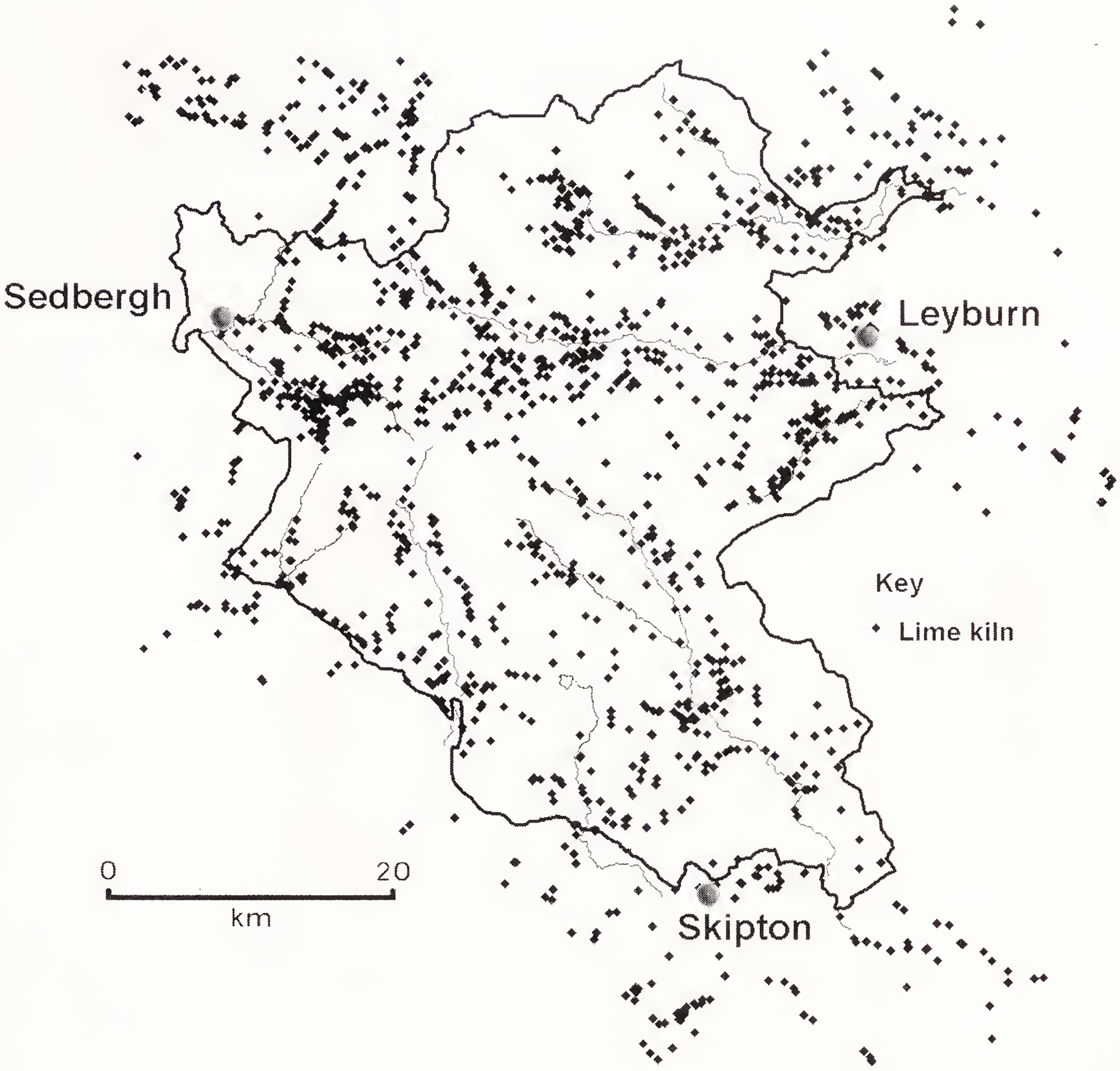

Fig.3: Distribution of lime kilns

the National Park were submitted to the Authority for inclusion on the HER database, and outside the Park to county HERs, as each parish was covered.

A broad range of variables was recorded at each site. Apart from basic data such as the GIS-compatible location, altitude and aspect (orientation) of each site, surrounding land use was noted as well as underlying geology. The presence of an obvious source of raw material and of access tracks to each kiln was recorded, together with a note of documentary and cartographic sources consulted. Full measurements were taken of surviving elements of the kilns as, for example, kiln width and height, internal details within the draw arch, bowl dimensions and any specific architectural features such as niches or poking holes.

Descriptive notes recorded aspects of kiln design – the shape of the front face, design and detail of arches, details of the draw hole through which burnt lime was drawn, dating evidence, type of stone and construction methods employed in building the kilns, and evidence of charging ramps and revetment walls. The condition of each kiln was noted subjectively using five descriptors: complete, semi-ruinous, ruined, site only, and no trace. The first designation was applied where kilns were either totally intact or mostly intact with only slight loss of facing stones; semi-ruinous was applied if the full structure of the kiln was evident even though there was structural damage and decay; whereas the designation of ruined means that it is not now possible visually to reconstruct the detailed form of the kiln owing to substantial collapse or infill. If a kiln had disappeared or totally collapsed to a heap of rubble, but was recognisably a kiln site, it was deemed to be 'site only', while 'no trace' indicates that no evidence of the kiln's existence has remained on the ground but there is archival or cartographic evidence to inform its former position. Finally, a photographic record was compiled and any special aspects sketched.

RESULTS

This narrative will focus on the following variables: underlying geology and assumed source of raw material, altitude, orientation, kiln size, current status, dating evidence, surrounding land use, and kiln design.

Geology and raw materials

It has been said that lime kilns in the Central Pennines are normally associated with a nearby limestone outcrop and that 'quarries can hardly be separated from the lime kilns to which they are an adjunct' (Fieldhouse 1980, 193; Raistrick 1972, 59; see also Raistrick 1968, 114; and Tarlow 2007, 54). If this were the case, there should be a close positive correlation between the distribution of lime kilns and the extent of limestone bedrock. Within the current sample 79 per cent of all sites are indeed located on limestone but it still leaves 21 per cent that are not, clearly a significant proportion.

Figure 4 is a simplified map of solid geology, ignoring superficial glacial deposits. Comparison of this with the distribution of kiln sites (see Fig. 3) points up the extent to which areas of limestone correlate with the latter: careful examination will show that many sites lie within the Millstone Grit and pre-Carboniferous zones.

Rather more striking is the percentage of kilns not associated with a quarry: only 57 per cent of the surveyed sites had a nearby quarry. From these two variables one must conclude that availability of stone cannot have been the sole, or indeed, prime determinant in so many cases. Other factors came into play.

Those kilns not sited on limestone but on Carboniferous sandstones or shales, pre-Carboniferous strata or glacial till deposits, and thus not closely associated with a quarry, either obtained their raw material from elsewhere or locally by

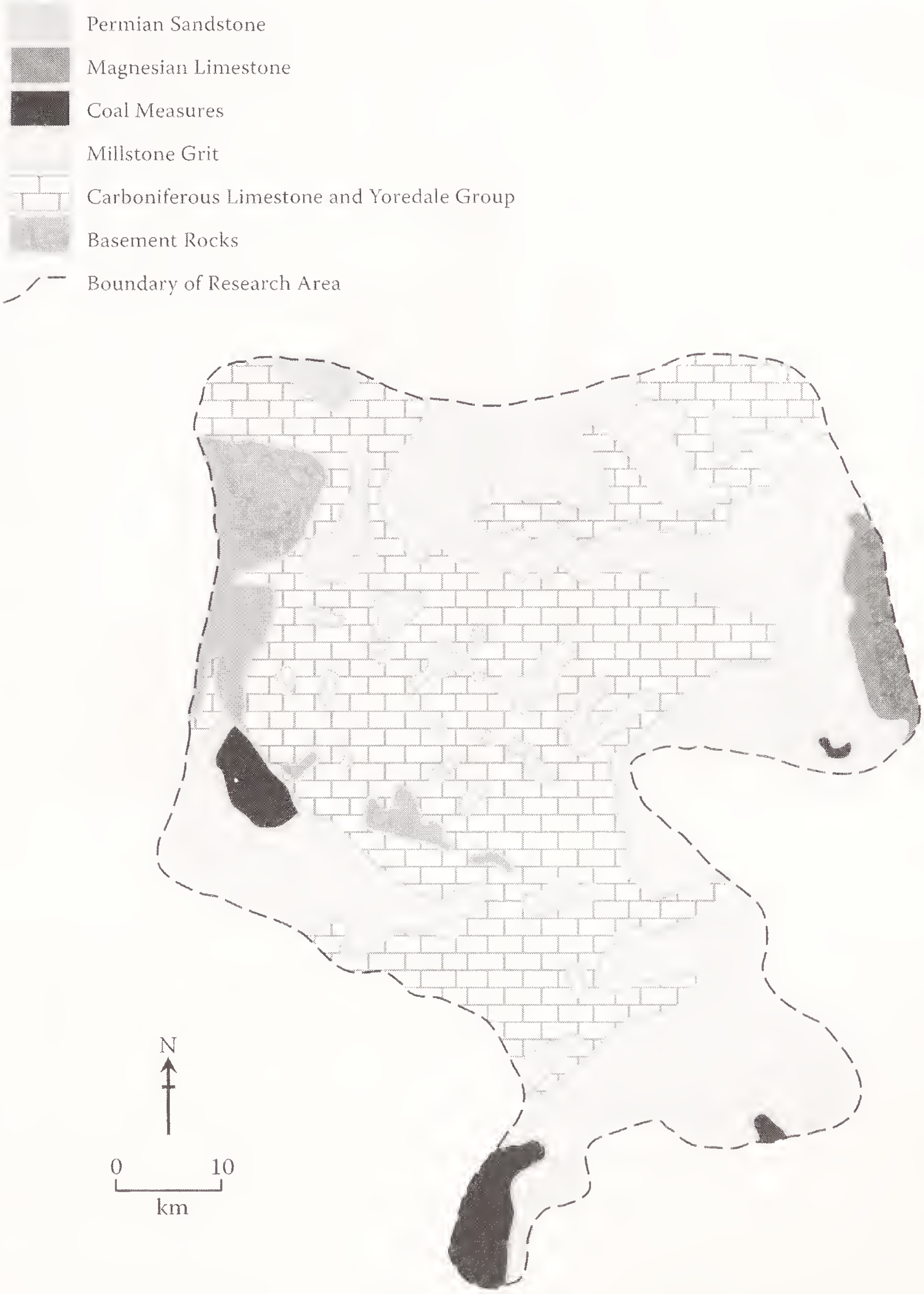

Fig.4: Solid geology

rather arcane methods. These included early modern practices such as hushing, whereby limestone cobbles were flushed out of till deposits using carefully channelled water; river stonary, whereby limeburners leased stretches of river to pick cobbles out of gravel spreads on the inside of meanders; and the digging of boulder pits on moorland till deposits. Each of these is discussed at length by this writer elsewhere (Johnson, forthcoming a).

If proximity to stone was not necessarily the main locational factor, those who had had kilns built must have been influenced by other considerations. Many of the surveyed kilns were sited close to accessible reserves of coal, even if the coal was not of high quality; coal reserves in thirty-eight parishes within the survey area are known to have been exploited. In most instances linking a given kiln to a nearby coal pit is conjectural, but documentary evidence does survive for some. For example, the Swinton Park estate west of Masham worked its own collieries from the late seventeenth to the mid nineteenth century and built a clamp lime kiln within the mining ground in 1773 and a masonry kiln close by in 1825 (NYCRO, ZS*). Fuel was often cited as a major production cost in lime burning and, if transport rates had to be factored in, the end cost could become prohibitive, especially if agriculture was the intended market. Instances have also been identified from the field survey of kilns built neither near stone nor fuel supplies. The string of kilns along the towpaths of the Leeds and Liverpool and Bradford canals fall into this category – all materials could be brought in cheaply – and it was either deemed more economically sound to produce the lime close to where it was to be consumed, whether in fields or urban/industrial growth points, or easier to transport chemically stable stone rather than unstable quicklime. These situations can readily be explained: the difficulty arises when more isolated kilns seem to have been built far from either raw material source. Here, one has to assume the prime motivator for a given kiln had based his decision on what he considered rational.

Altitude

In a region as topographically varied as the present research area there are marked variations in altitude between the fells and higher moorland expanses, the valley sides, and the dale bottoms and lowland fringes of the Dales. The altitudinal range of pasture ground extends from c. 50 m in the Wenning valley and downstream of Richmond to over 500 m in the upper reaches of Wensleydale and Swaledale. Recording altitude in the field survey was designed, on the one hand, to inform a reasoned analysis of the altitudes at which lime was being produced. Received knowledge has suggested that most liming was associated with parliamentary enclosure of the moors which would extend its range of production beyond the lower valley slopes. On the other hand, most farming land within dale bottoms and on the lowland fringes has clearly been improved at some point and in some way, which may have included liming along with draining, paring and burning and manuring and, mainly at an earlier period, marling.

If we take the first point, there should be a strong correlation between kiln sites and upland tracts. There is an immediate problem here, though, as determining the boundary between lowland and upland is very subjective, and a lowlander's definition is quite likely to differ markedly from that of a person attuned to uplands. For the purpose of this discussion, the distinction has been (rather arbitrarily) drawn at 309m (1000 feet), which correlates with Natural England's dividing point of 300m. Figure 5 shows that less than half of all sites (42.1%) occur above

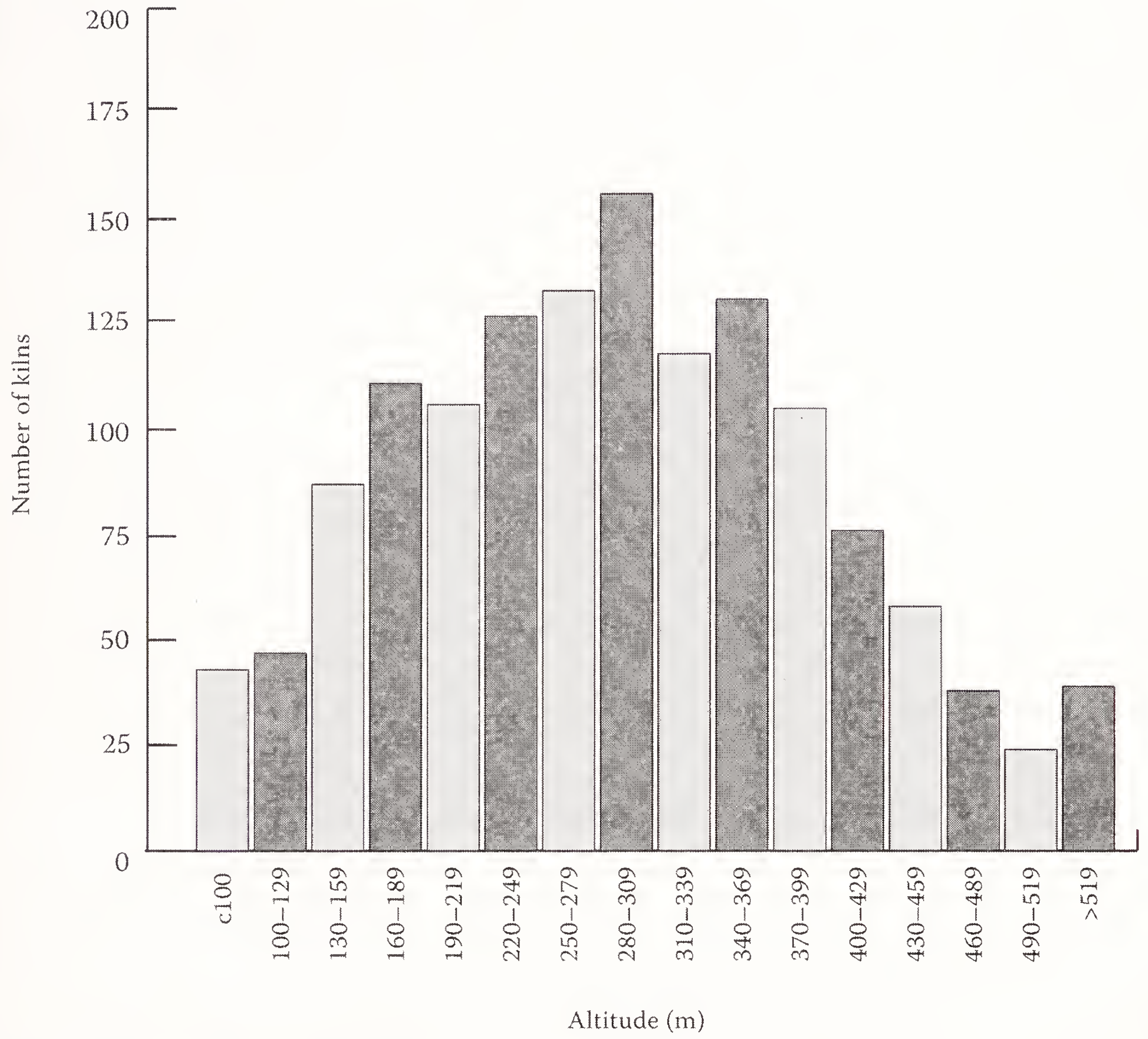

Fig.5: Graphic representation of lime kiln altitude

that limit, with only 7.2 per cent above 460 m (1500 feet). Even if 189 m (c. 600 feet) is conservatively adopted as the divide, this still leaves every fifth kiln below the cut-off level and thus not in the uplands.

This 20 per cent are found – by any definition – within the lowlands, the lower valley sides or in the dale bottoms. Enclosure of open fields here was largely completed by the middle of the seventeenth century, and in many manors even earlier, with the process of improvement closely following on. This presupposes that any liming must also be early, and this is a theme we shall return to below.

Aspect

The rate at which the charge (the raw material) burns within a lime kiln is partly dependent on the carbon content of the limestone and the quality of the fuel, as well as on current atmospheric conditions. In turn the rate of burn (or of calcination) determined the quality of the end product: too rapid a burn was as unwel-

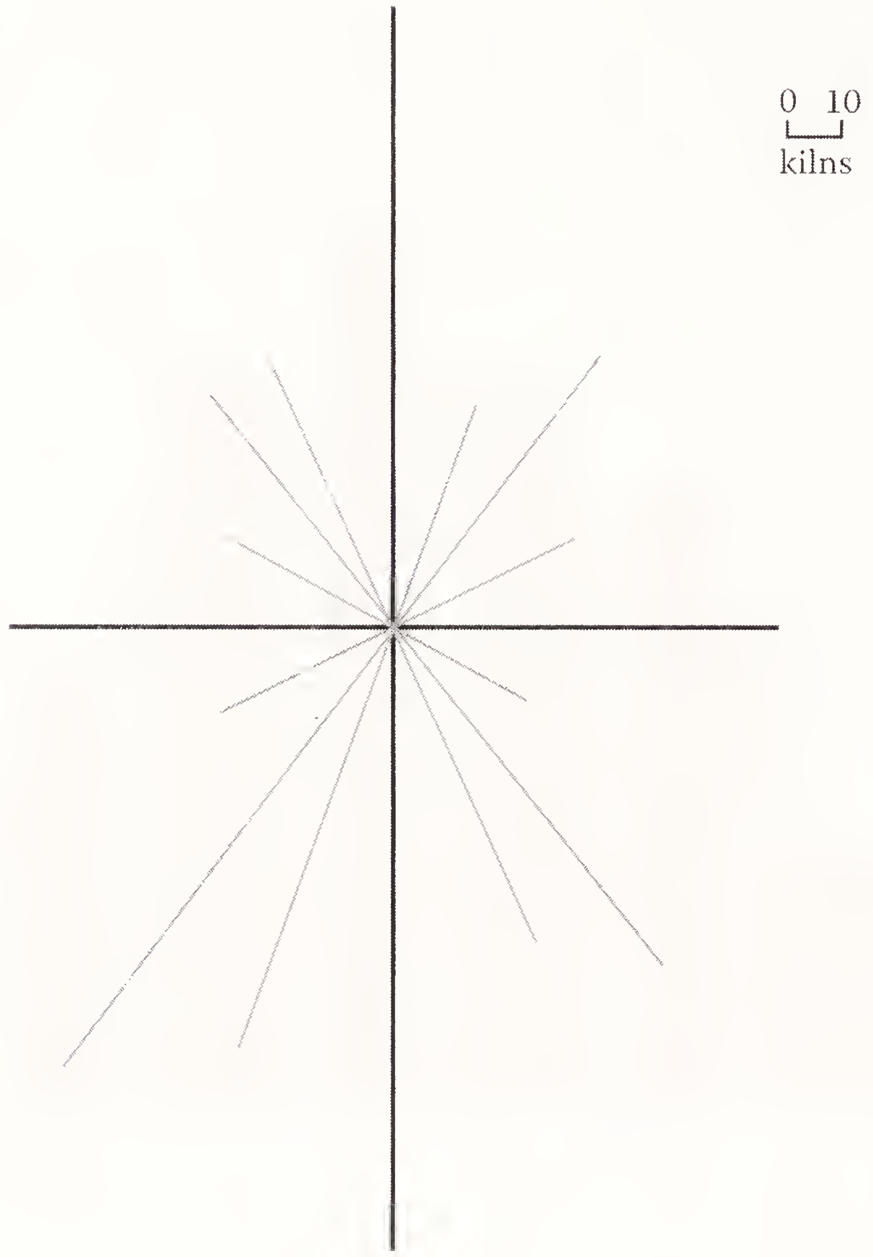

Fig.6: Diagrammatic representation of lime kiln orientation. The scale bar refers to the length of each line on the chart

come to a limeburner as a very slow burn. The former left quicklime over-burned and clinkered, while the latter was likely to produce large amounts of what was known as 'dead burnt' lime, in which parts of any given lump of quicklime drawn from a kiln would not be fully calcined. Neither was of saleable quality.

It was essential that limeburners took account of the factors touched on above by controlling the ingress of air into the kiln bowl, especially as field kilns had no means of sealing the bowl top from the elements. It was a matter of balancing airflow, and, to an extent, this could be achieved by manipulating the draw hole mechanism through which burnt lime was drawn. Draw holes of more sophisticated kilns had an integral iron arrangement that could be opened and closed as necessary, whereas the majority had no such mechanism and thus relied solely on the empirically-derived skill of the limeburner.

Given that prevailing winds in the Pennines blow from between south-west and north-west, it would seem logical that the optimum orientation – or aspect – of a field kiln is towards the west, in other words with the draw arch facing that direction. The corollary must be that only a relatively small number should face north-east. Figure 6 shows the orientation of 1101 kilns within the survey sample for which it was possible to determine aspect, and it clearly shows that logic is borne out. Just over 14 per cent face between north and east; 20 per cent face between south and west; but 60 per cent are aligned between south-east and north-west, the range of directions from which dominant winds blow. The fact that 11 per cent face north is perhaps surprising and there is no obvious way of explaining it. Possibly these kilns (and maybe others in the sample) were sited where local topographic detail dictated orientation even where it was less than ideal.

In large-scale commercial kilns one would expect the limeburners, or firemen, to have been highly skilled operatives, but the average field kiln would have been worked by part-time burners who fired kilns up irregularly and therefore did not have the opportunity to build up much experiential knowledge. Even in commercial concerns matters could go wrong, as shown by a wartime incident at Alston when the site manager was hauled up for breach of blackout regulations (quoted in *Cement, Lime and Gravel* 1943, 214). A gale had blown up overnight causing the kiln charge to flare up, with its entire contents burning through in forty-eight hours instead of the intended fourteen days.

There are also anecdotal hints that running a kiln had an element of hit and miss: one Irish operative at a kiln in Cleveland, when quizzed by an onlooker, claimed to have no idea how much stone or fuel went into his kiln and said he based his decisions on simply watching the fire (related in *Quarry Manager's Journal* 1935, 190). Another limeburner, when questioned in 1848 about his level of precision, casually said his role was merely to stand on the 'kilnhead, enveloped in smoke, to throw in stones and coals' (quoted in Skinner 1975, 225-30). Perhaps, however, there was a touch of bravado here.

Size

Suggestions have been made that it is feasible to determine kiln size and bowl volume, even where the entire kiln structure has gone, by reference to the earthwork that normally remains after the masonry has been stripped out (McMahon 1994 and 2001). This writer, however, does not accept this premise as there can be no means of reconstructing the cross-sectional form or the internal dimensions of a bowl from an earthwork hollow. As such, reliable bowl volumes have only been possible for six kilns in the entire survey. The method employed to compute volume was first devised for a survey of kilns elsewhere in the country using the mathematical formula:

$$V = 0.75\prod(d^2h \div 4)$$

where V = volume, d = bowl diameter at the rim, and h = overall kiln height

(Bick 1984, 91). Even this is not a failsafe method as cross-sectional profiles can vary so markedly, and because most kilns have had their bowls infilled and levelled off since abandonment it is impossible to postulate actual bowl form. To obtain an accurate measurement of volume the bowl must be empty.

Volumes calculated for empty bowls during this survey showed a good deal of variation: two, at a commercial site in Giggleswick, were very similar (34 m^3 and 40 m^3) while the remainder ranged from 13 m^3 for a small field kiln in Kettlewell to 26.4 m^3 for a roadside kiln in Hartlington near Burnsall. However, as the data set is so limited, no worthwhile conclusions can be drawn concerning kiln volume.

An exercise to try and quantify overall kiln size, carried out by this writer, also proved to be of little meaningful value. Measurements were obtained for all complete or semi-ruined kilns (323 sites in total) including kiln width at the base, overall kiln height on the front face and kiln depth (*ie* the length of masonry sides, if applicable). The problem arose because cross-sectional area and total kiln volume are also meaningless. Two kilns could have the same cross-sectional area but could have totally different forms: one might be tall and narrow, the other broad and squat, so what is significant here is not kiln size but design (see below). In addition, a kiln that is obviously big when viewed from the front may have one large, probably oval, bowl or two small round ones; it may have one large centrally-placed draw arch or two set side by side, or indeed two opposing arches. Once again, the key element is design, not size. Nevertheless, it would have been wrong to discount kiln size without attempting any analysis of the data.

Status

As stated earlier, this writer has visited 1379 kiln sites but, sadly, it does not follow that each site still has an extant kiln. Many have crumbled to a pile of rubble over the years as frost and wind have caused the facing masonry to fail; others have succumbed to slope movements; but many have been deliberately robbed out as they were perceived to be useful sources of building stone for elsewhere. Only 16 per cent of the total sample (1466 sites) can be described as ‘complete’ (Fig. 7) in terms of the descriptors defined above. This is below the equivalent rate for survival of traditional farm buildings in the Dales (33 per cent classified as ‘good’, [Anon 2007]), but it compares remarkably closely with the breakdown for this writer’s wider total kiln sample taking in parts of Westmorland and north-east Lancashire.

A further 7.5 per cent were in a semi-ruinous state when surveyed but at least their original form can still be discerned despite a certain degree of decay or collapse (Fig. 8). The remaining three-quarters have either totally decayed (16 per cent, Fig. 9), can only be recognised by an earthwork (36.5 per cent, Fig. 10) or have disappeared without trace (24 per cent). By contrast the equivalent figure for totally decayed traditional farm buildings in the national park is 18 per cent.

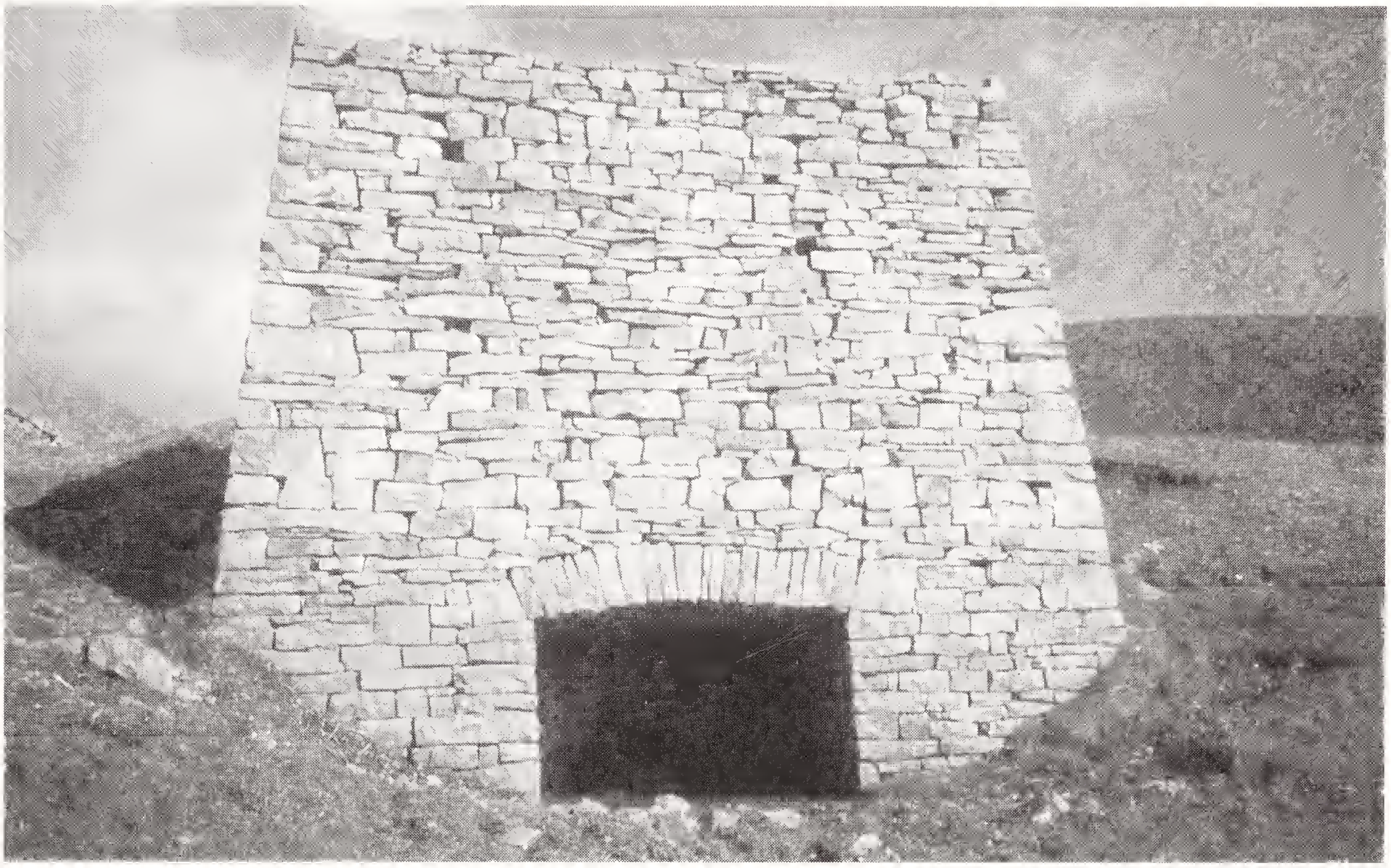

Fig.7: Lime kiln classified as 'complete', Gawthrop

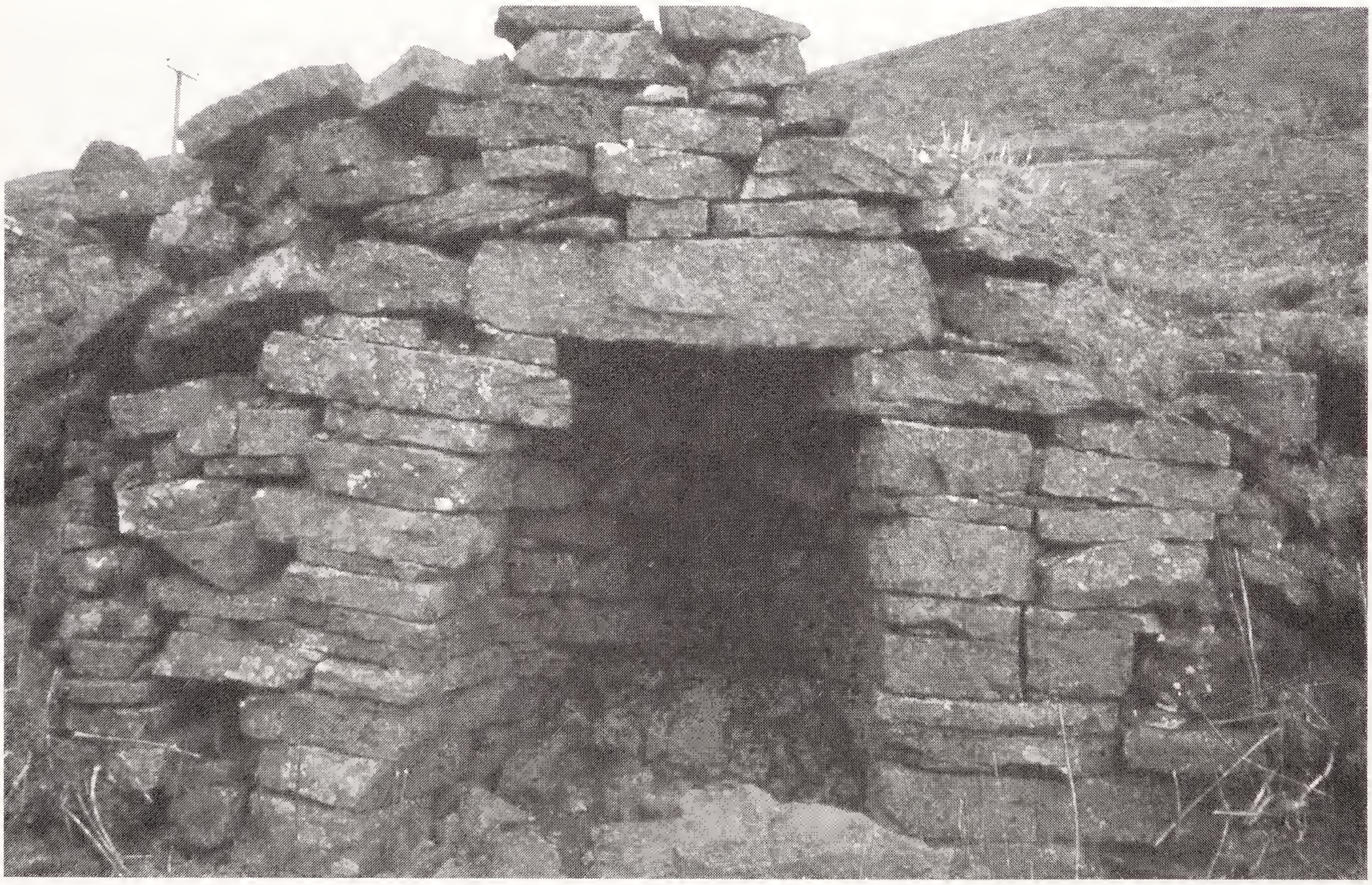

Fig.8: Lime kiln classified as 'semi-ruinous', Cotterdale

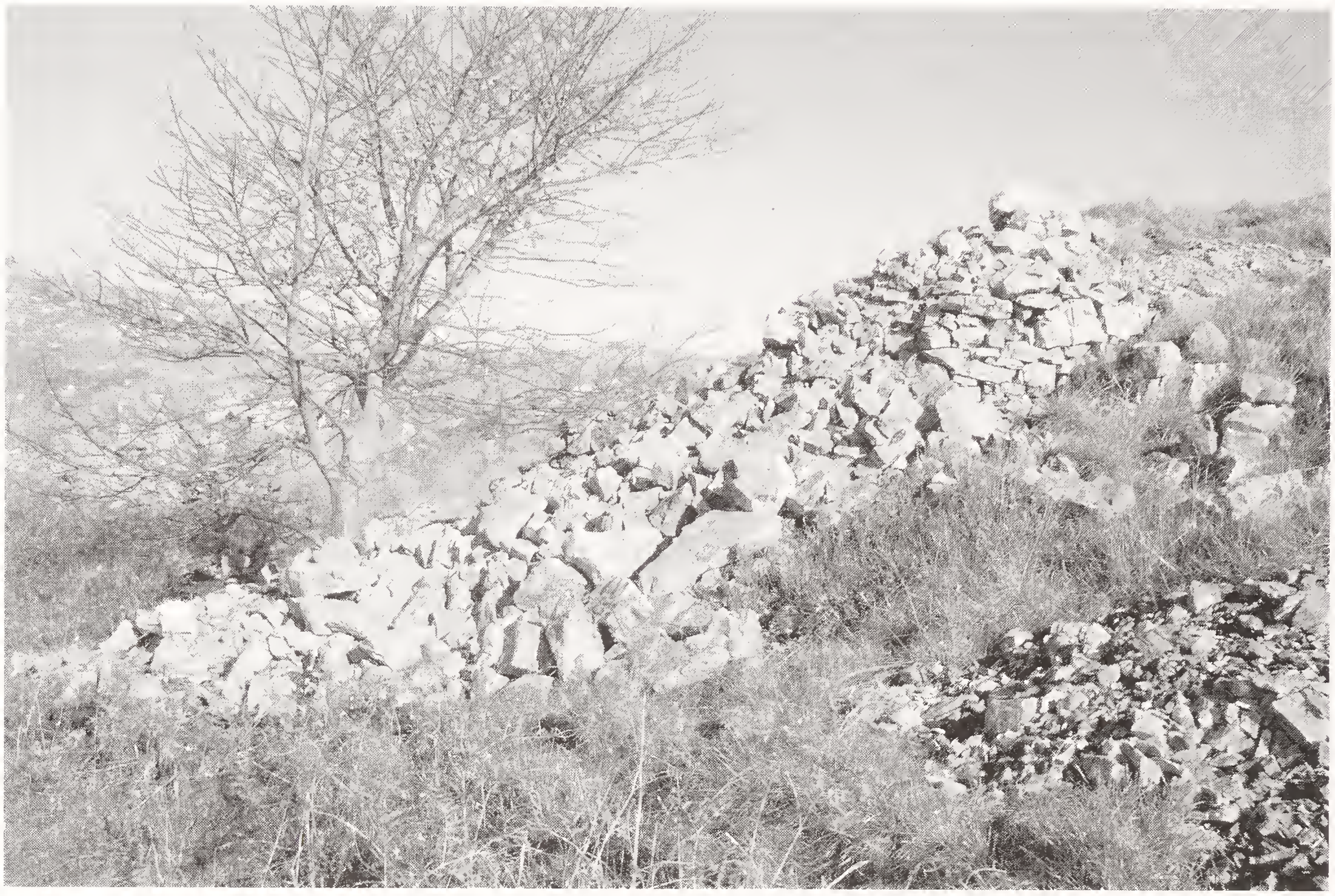

Fig.9: Lime kiln classified as 'ruined', Giggleswick Scar

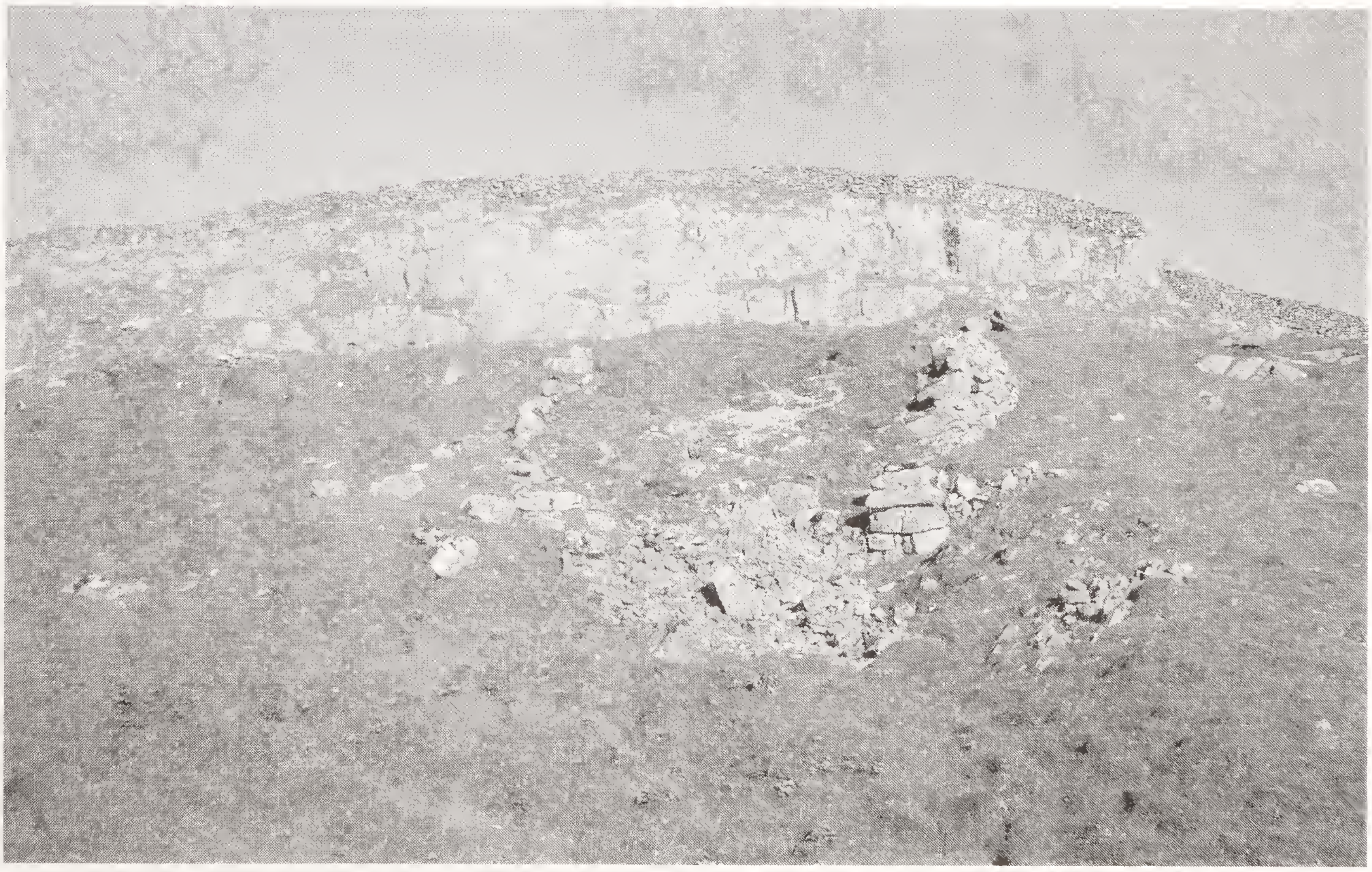

Fig.10: Lime kiln classified as 'site only', Giggleswick

Dating

Trying to date a given lime kiln can be fraught with difficulties. Unless a kiln bears a date stone (and the number of these located is minute[3]), or has a specific mention in estate or company archives, dating is often a matter of guesswork. At best, all one can rely on is kiln style to help inform relative rather than absolute dating: in other words, a very small, crudely built kiln is likely to be older than a large, well designed and well built kiln. Even this is not necessarily safe, though, as a crude kiln could have been built more recently as a cost-saving exercise for the improvement of one enclosure, whereas a large and impressive kiln may be of an earlier date but had to be substantial if it was commercially operated. Clamp or sow kilns, for example, have an origin at least in the medieval period, but documentary sources record the building of one in Colstersdale in 1773 (NYCRO, ZS*) and one in Crackpot, Swaledale, in 1851 (Barker MSS). In the latter case the farmers concerned knew a simple clamp kiln would suffice for the job in hand.

Tenancy conditions laid down in 1795 for the Braithwaite Hall estate in Coverdale reserved to the landowner, Thomas Wood, the 'liberty of building a lime kiln on East Hanghah', now Hanghow Pasture, for use by all Wood's tenants (NYCRO, ZS* Middleham). Within a year a kiln had been built, which still stands at SE1134 8577. In 1836 James Willis of Yorescott, north of Bainbridge, wrote into an agreement with tenant John Atkinson that he would pay Atkinson 10s. towards the building of a new kiln in Grange Gill and 8s. for burning six chalders of lime with further payments to him for burning lime up to 1842 (NYCRO, TD124). This may be the kiln that still stands at NY9304 9145 in a quarry at the head of the gill, that was considerably enlarged in later years. Some twenty years later landowner Elizabeth Routh of Gayle, near Hawes, entered into a legal covenant with John Moore of Fossdale in High Abbotside by which she allowed him £5 towards the building of a new kiln in Green Bank Pasture above Burtersett, in addition to annual payments for draining and liming the enclosures he was taking on (NYCRO, Z2). The kiln in question, now part-ruined, can be seen at SD8910 8897.

Cartographic sources have been employed in the past to try and date kilns, by comparing the inclusion of kilns on Ordnance Survey six-inch mapping with enclosure award and tithe apportionment maps (Cleasby 1995). The suggestion here was that as twenty-three kilns shown on the 1848 Ordnance Survey map were not marked on the corresponding 1841 tithe map, they must have been built in the intervening seven years. This may have been so, but it is a premature conclusion: this writer's database contains numerous examples of kilns marked on one map but not on another with no apparent logic. In some instances kilns are shown on enclosure or estate maps but not on the equivalent Ordnance Survey map which post-dates them: does this mean these kilns had totally disappeared in the interim period, or had they been for some unknown reason omitted by the later surveyors? The answer probably has to be the latter, as First Edition maps marked kilns that were by then out of use or decayed as 'Old Limekiln' or occasionally as 'Disused Limekiln'.

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[3] A kiln close to the ruinous St Simon's Chapel in Caldbergh (SE0868 8494) bears a datestone '1786'; and one in Melbecks (SD9461 9969) has the date 1865 scratched into a voussoir. A kiln in High Abbotside (SD8850 9213) has the date 1841 carved into a stone above the draw arch lintel.

In all, twenty-seven kilns within the sample were marked on Ordnance Survey maps in these ways. Altogether 84 per cent of all kilns were marked in one way or another on First Edition six inch maps, both for the kilns relevant to this article and to the wider survey. The only indisputable (but unsatisfactory) conclusion that can be drawn from these data is that the balance of 16 per cent had not yet been built or had totally disappeared – or had been missed.

Enclosure awards can be of value in themselves in attempting to date kilns, not by their maps showing kilns but by specific inclusions in the text. An enclosure map may show a kiln but one has to question if it is showing an actual pre-enclosure award kiln, or one built after the new allotments had been staked out but before the award was drawn up, or one proposed in the award that may in fact not have been built (though the latter is perhaps less likely). This writer has examined all 112 enclosure awards that cover the research area being discussed in this paper, and as many enclosure maps as have survived. Forty-one awards (36.6 per cent) made provision for the quarrying of limestone by inhabitants of given townships. In many cases the provision was to utilise the stone for whatever purpose they saw fit, such as road repair, building or walling, with permission neither granted nor denied for burning into lime; other awards restricted uses to road construction and repair and new walling.

A further 15 awards (13.4 per cent) delimited lands for public quarries specifically to get stone for lime burning to improve the new enclosures. The wording varied: the award for Carlton in Coverdale in 1815 set aside a plot 'for the purpose of erecting kilns thereon to be used in burning or making lime' (NYCRO, PC/CTT); and that for Dent in 1859 granted the right to 'work the Limestone in the same allotment and to burn it for their own use but not for sale' (WYAS Wakefield, A18). Others were more specific. For example, in 1774, the award for Gayles, north of Richmond, set out a public quarry 'for the burning into lime for the manurance' of those living within Dalton township (NYCRO, NRRD, AX. 54); while the Bellerby award two years earlier laid out two public limestone quarries with the right to 'burn the same into lime for making or repairing such buildings walls and fences and for manuring their antient inclosed lands or their said new allotments ... but for no other purpose' (NYCRO, PC/BEL). In a rather different mien was the 1759 award for carving up the former stinted pastures called Settle Banks, High Scarr and Scaleber to the east of the town (NCHRG). All those allocated new enclosures were guaranteed on Scaleber the 'right of passage to and from (their allotments) severally and respively through the north end of the sd share ... for the purpose of carrying and leading lime and tillage only either on horseback or in carts or carriages'.

When one considers that twenty-four (21.4 per cent) of the 112 awards pertained to areas with no limestone bedrock, and that a further five were only stinting agreements, the close correlation between enclosure awards and the quarrying of limestone or the burning of lime is remarkable. To recapitulate for a moment, 36.6 per cent made general provision for lime burning, with agricultural use not ruled out, and a further 13.4 per cent specifically promoted agricultural use. Add on the twenty-nine awards with no relevance and the total is just under 76 per cent. This leaves about 24 per cent unaccounted for. However, tying in field surveying with examination of awards has shown that every single one of this latter number had lime kilns built at some time, though whether as a result of or prior to enclosure cannot be determined. In other words, all 83 relevant awards can be linked in some way, even if rather tenuously, to lime burning.

How, though, does this assist in dating kilns? Analysis of all the enclosure awards has included identifying the year when they came into effect. By correlating this data set with the existence of kilns on the ground, it has been possible to put many of the kilns into broad chronological order, though the date of an award does not necessarily equate to when (and if) kilns were actually constructed. It thereby enables an element of relative dating of kilns as summarised in Table 2, though it adds nothing to attempts at absolute dating.

Decadal period	No. of awards: kilns built	No. of awards with provision
pre-1760	4	0
1760-80	6	4
1781-1800	6	2
1801-20	11	2
1821-40	7	2
1841-60	6	6
1861-80	1	0

Table 2: Relative dating of lime kilns by date of enclosure award, in decadal periods, for awards with kilns built or provision made for kilns

Land use

Though descriptive data were logged for land use around each kiln site today, they do not necessarily correspond to land use when the kilns were functioning. For example, eighty-three sites (out of 1392 logged) now sit within woodland or coniferous plantations but it is unlikely that more than a handful would have been built in such situations – planting post-dated abandonment of the kilns. The vast majority of sites (72 per cent) are now located within enclosed pastures and this is hardly surprising as most of these kilns would have been built for the reclamation or improvement of the land they sit within, or at least for enclosed land lower down. In some cases there is a clear physical link between a given kiln and the adjacent ground the lime was designed to be applied on, especially if the enclosures form a physically discrete unit of land within a generally unimproved area; in others any link remains conjectural.

Seven per cent of kiln sites are located on open moorland or common land and it can be safely assumed that these were sited to exploit a local source of stone or coal and were despatching lime to enclosed ground elsewhere rather than applying it on the moors. It would have made no economic sense to try and lime unenclosed wet and acidic moorland on a large scale, though it is also possible that such kilns were not producing agricultural lime at all but were serving construction needs in the valleys below. The 'elsewhere' could have been an intake on the edge of the moors, and many of the kilns in the moorland category were sited very close to pastures at the limit of enclosure.

Kiln design

When looked at from the front, kilns have either a squared or a rounded form, though there are variations of detail. Some squared forms have a front face that is battered back from bottom to top while others are more vertically set; some rise in one plane whereas other examples have a stepped front face. Rounded kilns can again rise vertically or be battered; they can be cylindrical or tapering from a broad base to a narrower top. Some were built as free-standing structures, with their masonry largely proud of the surrounding ground surface; others were built in a hollow cut into a natural slope, with the bowl rim at the upper ground level; and yet others were set into a natural limestone scar.

Across the research area as a whole slightly more than half of all surviving kilns (53.8 per cent) are rounded rather than squared. Contemporary treatises on farming and lime burning seemed unable to agree which was the stronger structurally, and builders questioned by this writer also proved unwilling to suggest which would have been the better option.

The style of a kiln is also a reflection of the number and position of its draw arches and the actual design of the arch(es), aspects we shall return to later. This writer has attempted to identify regional styles of kilns within the research area using two variables: whether rounded or squared in form, and the detail of draw arches, whether arched with voussoirs (of segmental or Romanesque design) or corbelled or lintelled (Table 3). It is stressed that this is a subjective process and ignores the fact that, for example, a segmental arch can have voussoirs laid in anything from a flat through a curving to a pointed Λ-shaped arch; or that some kilns have a rounded upper laid on a squared lower section. Nevertheless, it is a starting point.

Table 3 illustrates that arched squared kilns, arched rounded kilns and those with lintels are more or less equal in numbers, while corbelled kilns make up only 8 per cent of the total. These latter are restricted to Upper Wensleydale and tributary valleys such as Widdale with an outlying but much smaller nucleation in Swaledale. A degree of circumspection is required here, though, as there is no means by which a robbed out or totally collapsed kiln can be mentally reconstructed, so the findings shown in the table could be flawed and misleading. These conclusions are necessarily evidence-based.

Area	Round with arch	Squared with arch	Lintelled	Corbelled
Wharfedale	31	8		1
Lower Wharfedale & South Craven	3	7	2	
North Craven	14	33		
Wensleydale	20	14	38	28
Swaledale	13	18	24	5
Wens. & Swaledale outside YDNP	10	10	3	
Cumbria in YDNP	36	38	59	
S.E Westmorland	7	39	12	3

Table 3: Typology of lime kiln styles: number of surveyed kilns

Having accepted this proviso, preliminary conclusions can be drawn from the data. Wharfedale and its tributaries are heavily weighted towards rounded kilns with voussoir arches (Fig. 11 and Fig. 14 zone 1), whereas in North Craven and Lower Wharfedale squared kilns with voussoir arches outnumber rounded forms by two to one (Fig. 14 zones 2 and 3; and see Fig. 7) and corbelled and lintelled kilns are totally absent. Swaledale and Wensleydale outside the national park are marked by a dominance of kilns with voussoir arches and a perfect balance of rounded and squared kilns (Fig. 14 zones 6 and 7). That part of the West Riding now in Cumbria has all designs (Fig. 14 zone 8), as do Wensleydale and Swaledale (Fig. 14, zones 4 and 5), but these areas have a greater proportion of kilns – round and square – with lintels rather than voussoir arches (Fig. 12), and Wensleydale has a high proportion of corbelled designs (Fig.13). By contrast, Westmorland is dominated by squared kilns with voussoir arches. Fig. 14 summarises the typology of regional styles described here.

Overall, 54.4 per cent of all sampled kilns have a segmental arch (see Fig. 7), 29.8 per cent have lintels (see Fig.12), with three being timber, and 15.8 per cent have a Romanesque arch (Fig. 15). There is a close positive correlation between the existence of a Romanesque arch and the general high quality of build. It may also be the case that such kilns are later in date than simpler and smaller lintelled

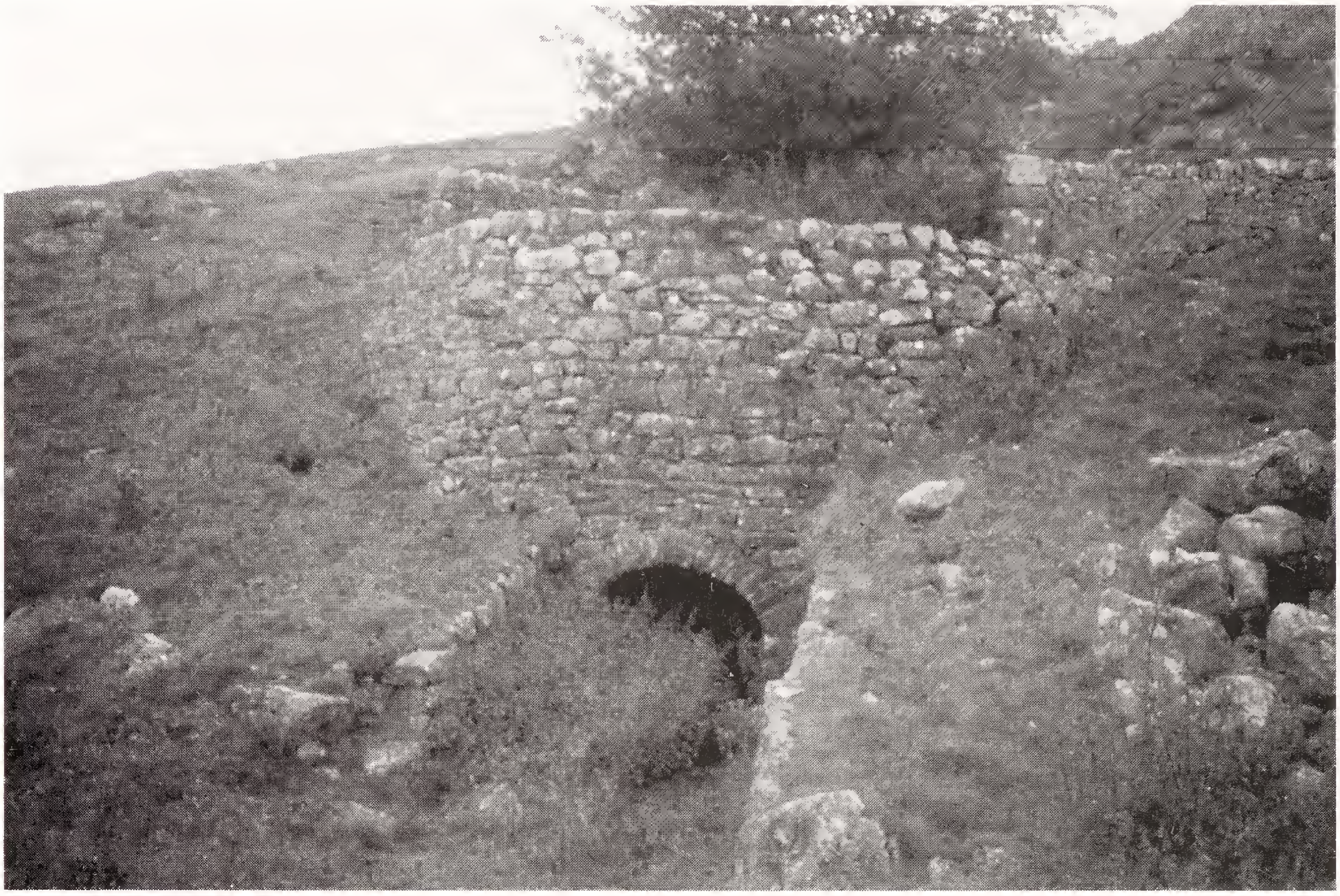

Fig.11: Rounded lime kiln with voussoir arch, Bordley

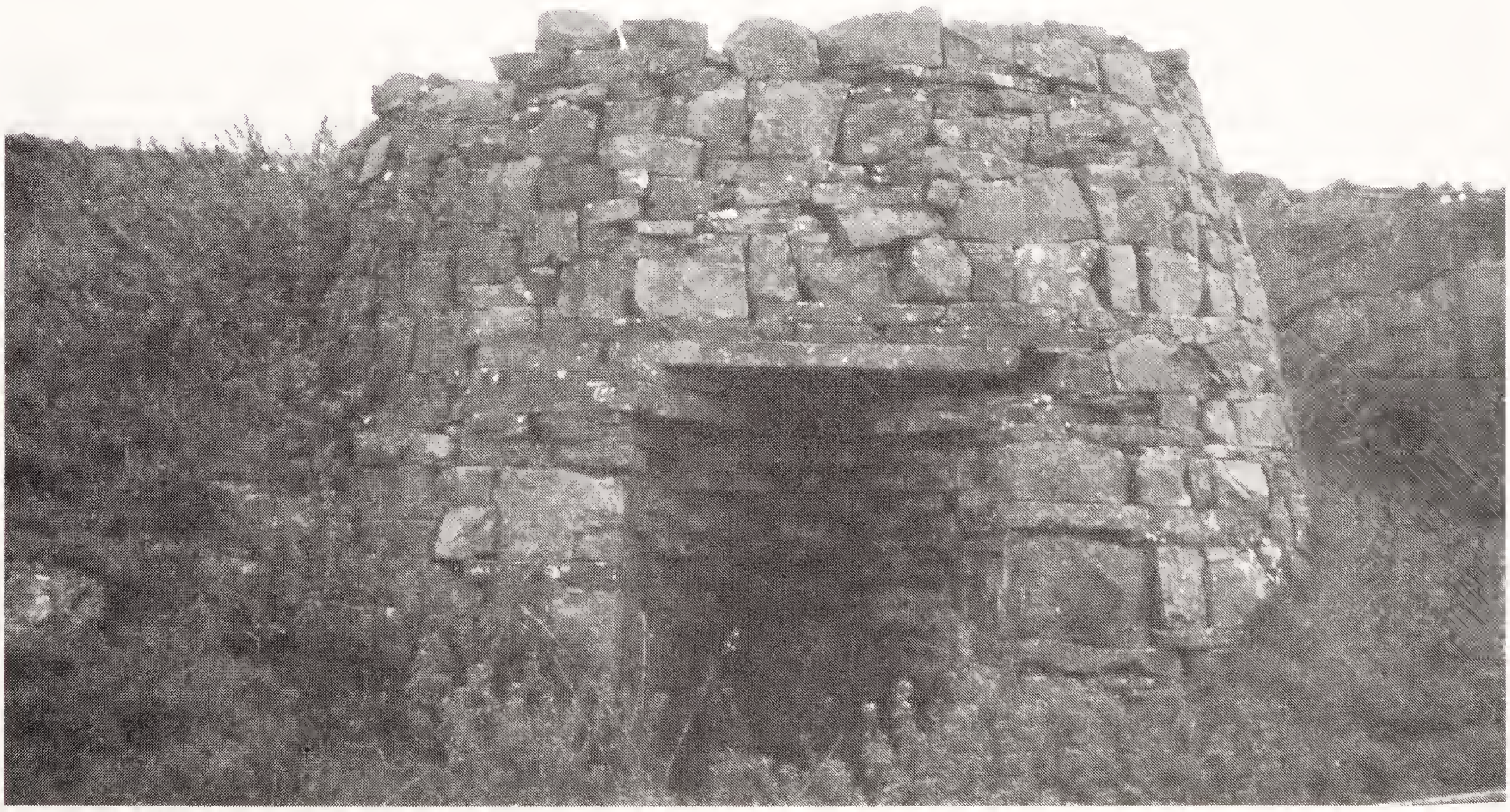

Fig.12: Lime kiln with a lintelled arch, Sleddale

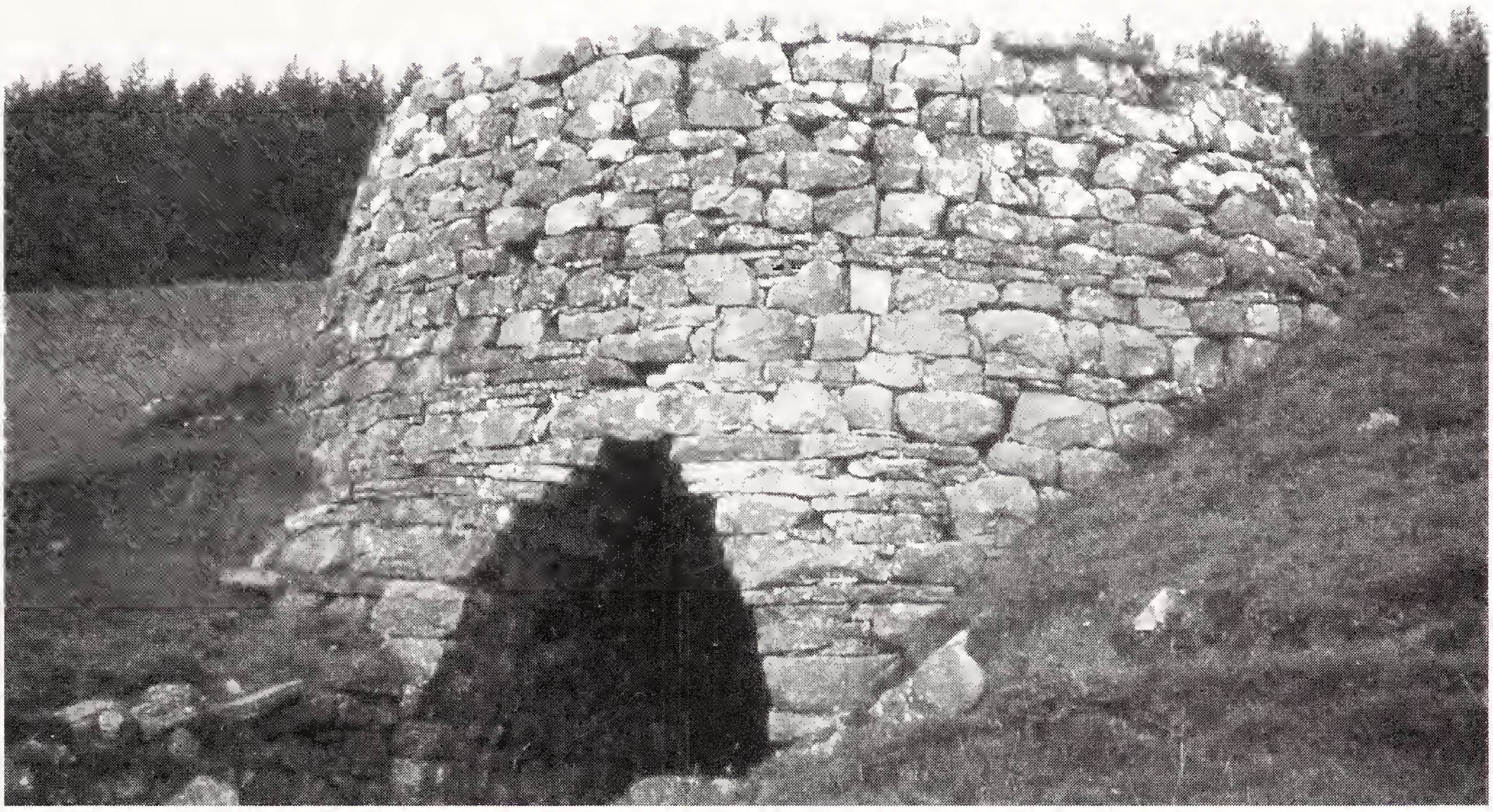

Fig.13: Lime kiln with a corbelled arch, Bishopdale

kilns, though no dating contrasts could be recognised between those with segmental rather than Romanesque arches or those with corbelled frontages.

The image of a kiln that would probably come most readily to mind is of a single-arched structure, yet thirty-four kilns in the survey have multiple arches. Twenty-one of these have twin arches set into the broad front face of the kiln, eight kilns have two opposing arches set on the side faces, three have three adjacent arches (Fig.16), and one each has four or six arches (Table 4). Without exception, those with more than two were associated with large-scale, mid to late nineteenth-century,

Area	Twin	Opposing	Three	Four	Six
Upper Wharfedale					
Lower Wharfedale & South Craven	4			1	
North Craven			2		
Wensleydale	1				
Swaledale	4	4			
Wens. & Swaledale outside YDNP	12	3	1		1
Cumbria in YDNP		1			

Table 4: Number of kilns with multiple draw arches

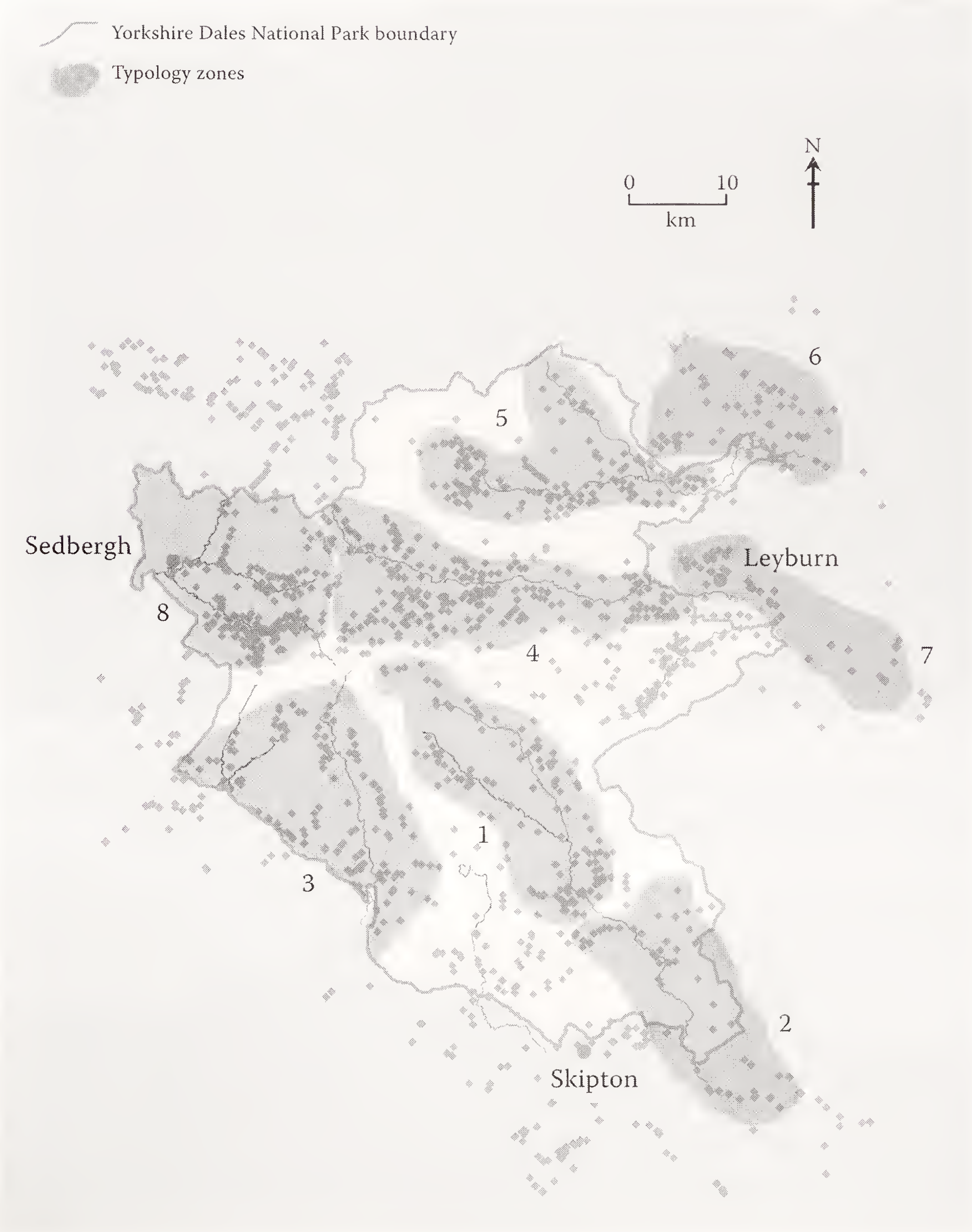

Fig.14: Typology of lime kiln styles

commercially operated quarries. The double-arched kilns would also have been worked on a commercial basis but in more rural surroundings, on a smaller scale and, in some cases, at an earlier date.

Having more than one arch does not necessarily equate to multiple bowls: six of the twin-arched kilns do indeed have twin bowls, but not those with opposing

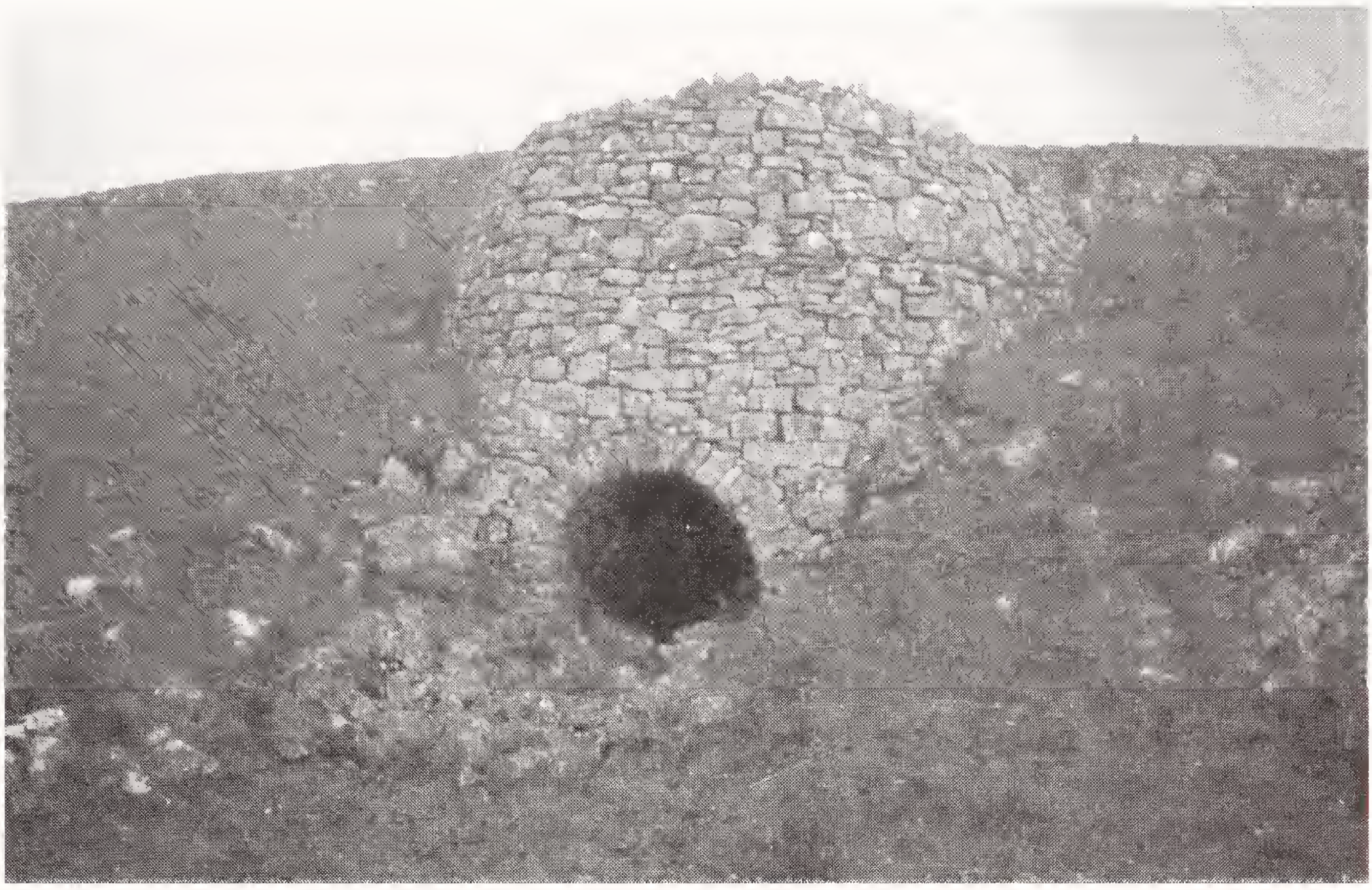

Fig.15: Lime kiln with Romanesque arch, Starbotton

arches. The mode of operation of a kiln with two bowls and two arches is easy to understand as each bowl would have been worked alternately, probably on a batch basis. One bowl was filled, burned and emptied in its entirety so, by carefully managing the various processes, the limeburners could ensure a more or less constant supply of quicklime. If the batch method was used in a single-bowl kiln, then lime production can only have been intermittent. Where one bowl fed two draw holes, either adjacent or on opposite sides of the bowl, some kind of mechanism – called a downcomer – was required to direct burnt lime to one draw hole or the other, or to both at the same time. The advantage of having two presumably allowed these larger capacity kilns to be emptied more quickly at times when demand was pressing.

Just as one bowl could feed into two draw holes, so two bowls could feed into three draw arches, or three bowls into six, depending on how the kilns had been designed. One kiln, between Masham and Bedale, has two bowls and three draw arches but four draw holes: each outer arch has one draw hole and the middle arch has a draw hole from both bowls (see Fig. 16).

Because the vast majority of kiln bowls were filled in after abandonment it is impossible to identify the precise nature of the downcomer. In later commercial kilns a cast-iron arrangement was employed consisting of chutes which could be opened and closed as necessary. In the smaller multiple kilns, though, the evidence is almost totally lacking. The kiln mentioned above, near Bedale, is an exception. With the permission of the current landowner, a farmer whose family worked kilns in the quarry for many generations, one of the twin bowls was fully excavated by a

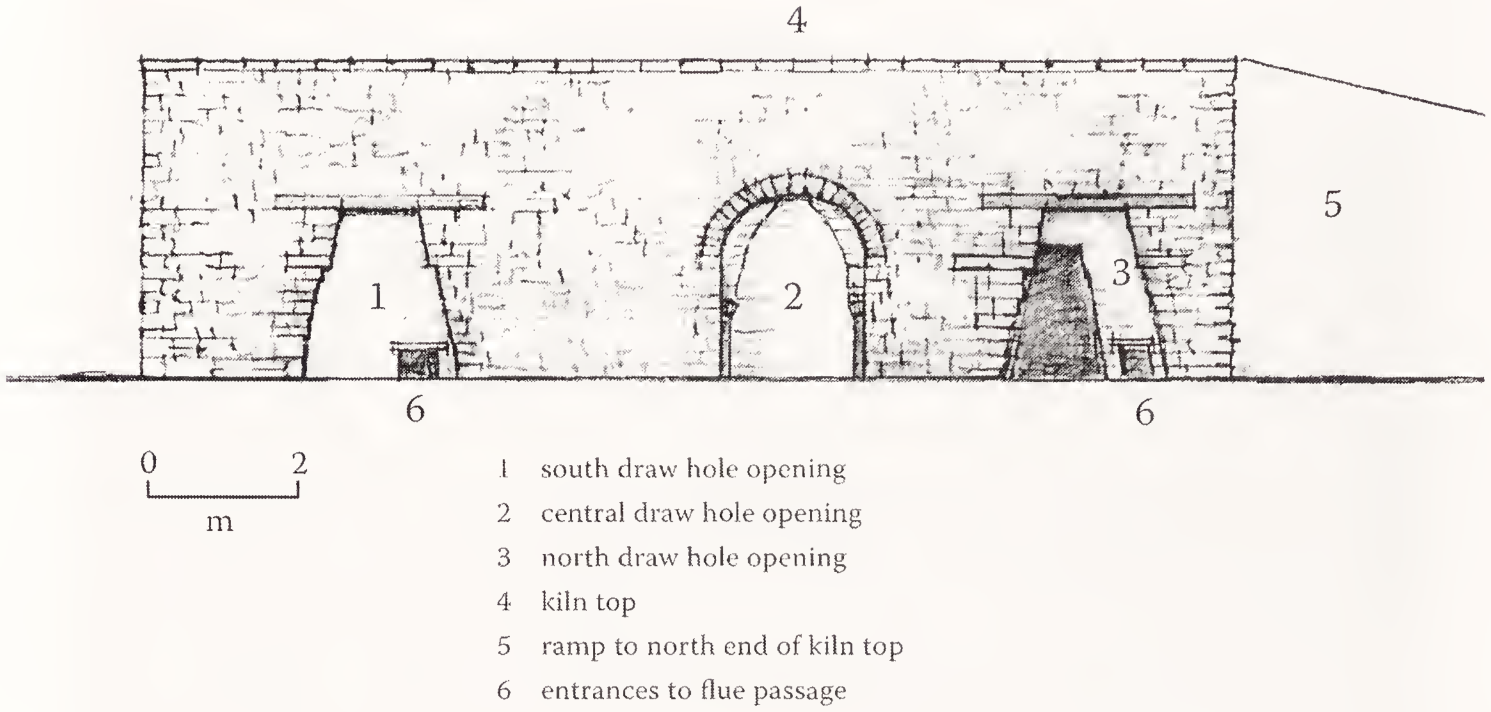
4
5
1
2
3
6
6
0
2
m
1 south draw hole opening
2 central draw hole opening
3 north draw hole opening
4 kiln top
5 ramp to north end of kiln top
6 entrances to flue passage

Fig.16: Front elevation reconstruction of a lime kiln in Snape 26
(Drawn by Jill Sykes)

small team, led by this writer, in 2007. At the base of the bowl a narrow wall built of firebrick, less than 1m high, divided it into two, and cast-iron grill arrangements were still *in situ* across the base set on this wall (Fig.17). Unfortunately it was not obvious how the burnt lime would have been directed to the opposing draw holes as the lime within the bowl would have settled on the grill, preventing it being moved. What was surprising in this bowl was that the floor beneath the grill consisted of thin softwood planks with no scorch marks evident. Clearly the grill prevented burnt lime from reaching the floor, and the lack of scorch marks also emphasises the fact that lime in the lower third of kiln bowls was cooling down and not at a high temperature.

Because temperatures within the bowl (ideally) reached 900°C, at least within the central calcining zone, the inner lining needed to be heat resistant. Perhaps the most logical means of achieving this would have been to use firebrick, but smaller, farm-based kilns rarely did. There is no possibility now of determining how many kilns had such linings given the reality that the majority of extant kilns have long since had their bowls filled in and levelled off at the rim, and that many kilns where part of the bowl is still visible were internally stripped out at some point after abandonment. There is, however, a strong likelihood that cost factors (purchase and transport) ruled out the use of firebrick in small-scale kilns. Certainly no kiln that predates 1820 could have used firebricks, as the technology to make them was only perfected around that time. Within the sample only fifteen kilns were found to have *in situ* firebrick and, of these, only eight bear a manufacturer's stamp.

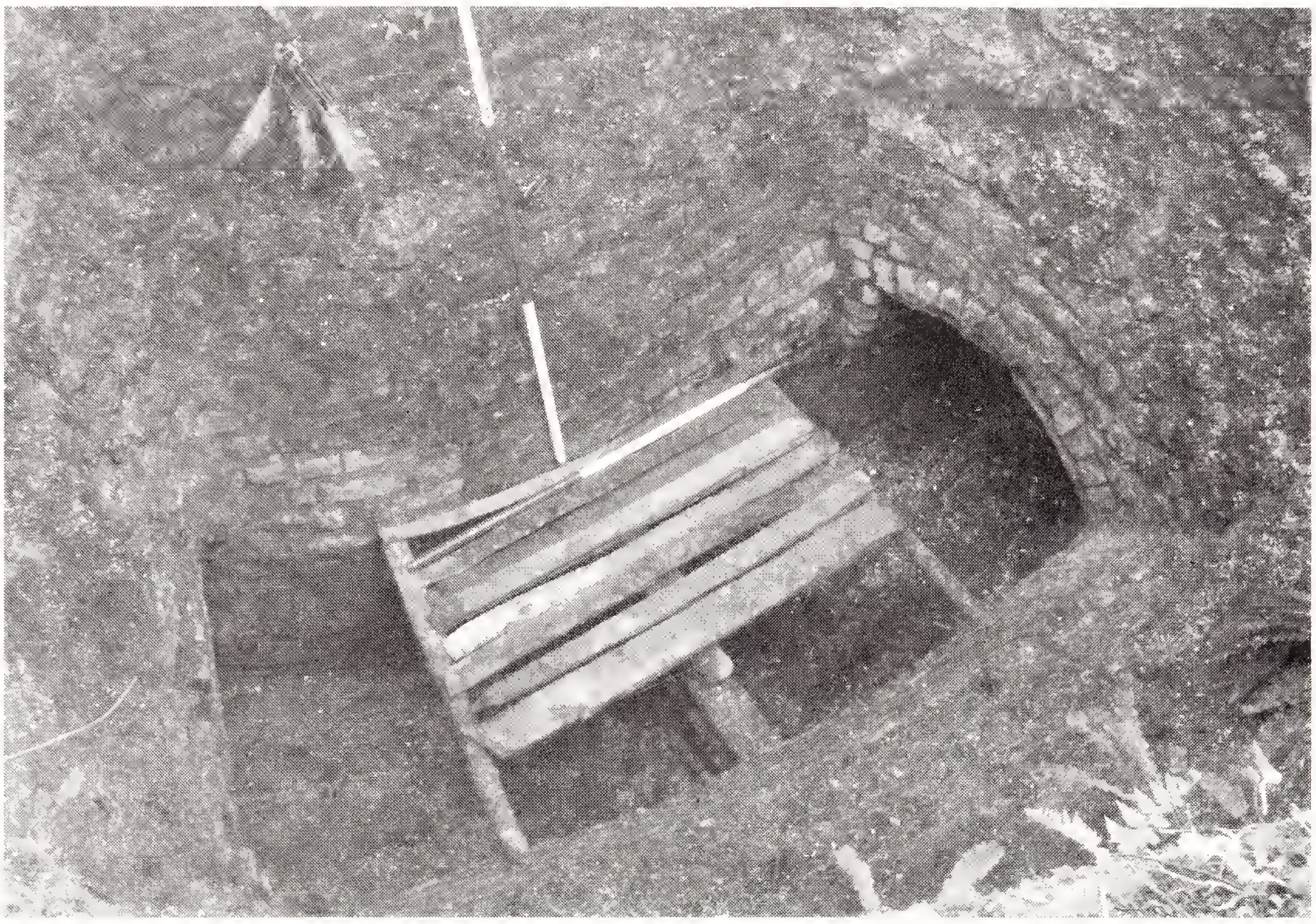

Fig. 17: Internal detail of a lime kiln at Snape

Bowl linings in most kilns consisted of narrow-coursed, semi-dressed sandstone blocks with the long axis set into the lining; in other words the stones had been laid as headers. In most bowls this lining was fire-reddened; in some the outer face had been markedly sintered, suggesting repeated usage of the kilns.

Quicklime is highly unstable chemically when subjected to moist air so limeburners must constantly have been faced with the problem of trying to prevent it slaking at the kiln. Perhaps it was bagged or packed into sacks immediately within the draw arch and then despatched from the kiln, making it someone else's problem, or taken away to be heaped or spread on local pastures in which case it would not have mattered if it began slaking when taken out from the kiln. If large quantities of lime were being produced, though, there must have been some means of keeping it in the dry. One such method was to build a lime shed adjacent to the kiln, or attached to the draw arch opening. Twelve lime sheds have been positively or putatively identified, all having been built dry stone, mostly with signs of a monopitch roof. None was found with the roof still intact.

CONCLUSIONS

Lime kilns were an almost ubiquitous feature within the Yorkshire Dales and, though many have now gone, they are still one of the most common elements of the landscape. This paper has described the comprehensive field surveying of kiln sites as part of a multi-faceted research programme into historic lime burning and the impact of lime across the Central Pennines and contiguous areas. Field surveying has been complemented by archival research and archaeological excavation to produce what is arguably the most ambitious record of lime kilns in the country.

This work has synthesised and analysed for the first time precise details of lime kilns within the area in terms of style, size, status, and how individual kilns sit within their immediate surroundings. The results of the fieldwork are also beginning to shed new light on certain aspects of received knowledge and to inform a critical re-evaluation of lime burning. For example, the application of agricultural lime has a much longer history and a broader geographical extent in and around the Dales than hitherto appreciated, as ongoing research is showing.

Finally perhaps, the methodology employed here has relevance for future studies of a once important and now-lost rural industry elsewhere in the country, to take them beyond the gazetteer format.

ACKNOWLEDGEMENTS

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DEFAMING THE DEAD: A CONTESTED GHOST STORY FROM FIFTEENTH-CENTURY YORKSHIRE

By R.N. Swanson

The doctrine of Purgatory made ghosts a credible phenomenon in pre-Reformation England, with Yorkshire providing a notable clutch of ghost stories from the early fifteenth century. A case brought in the consistory court at York in 1424 nevertheless shows that ghost stories were not always believed, and might be challenged and rebutted through disciplinary processes. However, whether such processes are actually evidence for blanket denial of the existence of ghosts remains an open question.

In popular understandings of the medieval world, the assumed credulity of those centuries is perhaps taken for granted. The post-Enlightenment world – even if it is now also a New Age world – finds it increasingly difficult to come to terms with the scale and nature of the religious activity of the middle ages, and particularly with a cosmological approach which accepts parallel worlds of the living and the dead which may intersect, or other conceptions of the universe which allow for the existence of additional forms of being such as angels and demons.

Yet the middle ages did accept the existence of those parallel worlds, and of their intersection. Living humans might visit the worlds of the dead, returning from Hell and Purgatory (but rarely Heaven) to report their experiences. The dead sometimes broke through to the living, wandering as ghosts to wreak havoc or petition for assistance to secure their ultimate salvation. Necromancers, mediums, and the simply anxious sought portals through which to make contact with the dead and re-establish communication.[1]

So much is well-known, and medieval England generated its own clutches of tales of spectral visions and visitations. Early fifteenth-century Yorkshire provides the locale for one particular cluster, the 'Byland abbey ghost stories' appropriately written up by none other than M. R. James in the 1920s.[2] Another tale of an alleged Yorkshire ghost, dating from slightly later in the fifteenth century, is less well known, yet no less interesting. In this case, however, the interest is as much for the challenge to the tale, as for its telling.

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[1] See in general R. N. Swanson, 'Ghosts and ghostbusters in the middle ages', in Peter Clarke and Tony Claydon, eds, *The Church, the Afterlife and the Fate of the Soul*. Studies in Church History, 45 (Woodbridge, 2009), pp. 143-73, citing further literature.

[2] M. R. James, 'Twelve medieval ghost-stories', *English Historical Review* [*EHR*], 37 (1922), 413-22; translated, with further commentary, in A. J. Grant, 'Twelve medieval ghost stories', *YAJ*, 27 (1924), 363-79; also incompletely in Andrew Joynes, ed., *Medieval Ghost Stories: an Anthology of Miracles, Marvels, and Prodigies*, (Woodbridge, 2001), pp. 120-5.

The tale itself is simply recounted in the main record, although rather baldly, and clearly incompletely.[3] Thomas More of Kelfield, in the East Riding of Yorkshire, claimed that on Ash Wednesday of 1424 he had encountered the ghost of Henry FitzHenry, also (formerly) of Kelfield, although without specifying where this had happened. In fact, what he originally encountered was a spectral pig, which duly transformed into the human ghost. Henry had a message to convey: that his son, John FitzHenry, should restore to Robert Henryson, again from Kelfield, his house there with its appurtenances.[4] This is all that is reported, but it can be assumed that Thomas did pass on the message, or at least that he broadcast a report of his experience which gained some public attention.

As it stands, this is a fairly typical ghost story, with elements which can be found elsewhere. The ghost as shape-shifter appears in some of the Byland tales, with the spirit in one case appearing as a bird and a she-goat before becoming visible as human (although not necessarily as a recognisable or recognised individual).[5] Similarly, in one of the main continental ghost-narratives, from fifteenth-century Germany, the ghost appears first in the form of a dog before taking human shape, and identifying itself.[6] Whether Henry FitzHenry was recognised from his physical characteristics, or because he explained who he was, is not stated; but the key point is that he is identified. (The report simply says that he appeared 'in the likeness of a man' – '*in similitudine homine*' – leaving open the possibility that, while humanoid in appearance, he did not actually look like the deceased.)

Clearly this ghost needed human contact, basically to pass on his message. The instruction to Thomas suggests a concern to remedy a wrong, as part of a process of securing salvation by removing the burden of sin which still afflicted a soul in the afterlife. If so, the presumption must be that Henry was in Purgatory: such restitution would not ameliorate the fate of anyone in Hell, and indeed whether souls could return as petitionary ghosts from Hell was open to debate.[7] Possibly the property dispute reflected some kind of family feud, with Henry having diverted the land from relatives: the similarity of surnames – FitzHenry and Henryson – is suggestive. Restitution of the house to its 'rightful' owner would resolve the problem, and set Henry's soul at peace. The notion of the restitution of wrongly acquired goods (which might be borrowed rather than stolen) as a means to remedy wrongs and secure a soul's salvation appears in other medieval ghost stories.[8] Indeed, there is a very close parallel to the Kelfield case in the 'Byland' collection, where a female ghost used the person to whom she manifested as intermediary to urge restitution of charters she had passed to her brother, thereby diverting lands from her husband and children to him. In this instance the brother subsequently had an encounter with his dead sister, but refused to return the lands, condemning her to continue her wanderings.[9]

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[3] Borthwick Institute for Archives, York [BI], Consistory Court Act Books, Cons.AB2, f.39v.

[4] Ibid.: '*domum suam cum pertinentiis suis*'. I assume that this is Robert's house, of which he had presumably been wrongly dispossessed, although it could alternatively be Henry's house (now John's) to which Robert had a claim and which was to be transferred to him.

[5] James, 'Twelve medieval ghost-stories', pp. 415, 417 (= Grant, 'Twelve medieval ghost stories', pp. 365, 367-8).

[6] Wilhelm Seelmann, 'Arnt Buschmans Mirakel', *Jahrbuch des Vereins für niederdeutsche Sprachforschung*, 6 (1881), pp. 40-1; Claude Lecouteux, *Dialogue avec un revenant, XVe siècle* (Paris, 1999), pp. 45-6 (French translation).

[7] Swanson, 'Ghosts and ghostbusters', pp. 152, 154.

While the alleged manifestation of Henry FitzHenry's ghost is, in terms of medieval ghost stories, nothing spectacular, subsequent events make this a notable case. What happened to the house is unknown; but in all probability it stayed with John FitzHenry. The story is only reported because in the following December, actually on the ninth, More found himself having to answer before the ecclesiastical courts at York for his behaviour, in a case which gave him the choice of excommunication or penance. The legal process here is obscure, because the case appears to have been brought *ex officio* – as a prosecution by the church authorities, rather than a case between parties.[10] The presumption has to be that John FitzHenry refused to relinquish the house, and considered the whole story a trumped up attempt (possibly collusive between Robert Henryson and Thomas More) to get him to abandon his right. What is intriguing is the nature of the case: the accusation against Thomas was that his whole story amounted to a defamation of Henry FitzHenry, to which he eventually confessed. The case is recorded in two entries in the court book; the first recounts the alleged encounter with the ghost; the second is the entry noting the sentence against Thomas and the penance enjoined on him.[11] At the heart of the penance, as a public admission of wrong-doing, was an acknowledgement in Stillingfleet parish church (Kelfield being a township in that larger parish) that More was doing penance precisely because of his defamation of the deceased: 'I am performing this penance because I rashly defamed Henry FitzHenry now after his death, and I said that I encountered the spirit of that Henry and spoke with it.'[12] The record also refers to similar public penance in York Minster, but the entry is ambiguous about whether this also required the public announcement to explain why it was being performed.

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[8] E.g,, S. E. Banks and J. W. Binns, eds, *Gervase of Tilbury,* Otia imperialia*: Recreation for an Emperor* (Oxford, 2002), pp. 766-7.

[9] James, 'Twelve medieval ghost-stories', p. 422 (= Grant, 'Twelve medieval ghost stories', p. 375).

[10] For the distinction, R. H. Helmholz, *The Oxford History of the Laws of England, vol. 1: The Canon Law and Ecclesiastical Jurisdiction from 597 to the 1640s* (Oxford, 2004), p. 316.

[11] BI, Cons.AB2, ff.39v, 40v.

[12] 'Hanc penitentiam ago pro eo quod Henricum FitzHenry iam post mortem suam temere diffamavi, et dixi quod ipsius Henrici spiritum obviavi et loquelavi cum eodem': BI, Cons.AB2, f.40v.

That the case was treated as one of defamation is striking. Defamation cases were one of the main components of the business of the English church courts in the centuries before the Reformation (and later), but defamation is generally an action between two living parties.[13] Yet in this case the man whose reputation is defended was dead, the challenge to his good name being presumably an imputation that he had defrauded Robert Henryson or the person in whose right he might claim title to the disputed property.[14] Or was the defamation the suggestion that Henry FitzHenry was an unquiet soul? The public declaration of the reason for being put to penance certainly stresses the claim to have encountered the ghost, and makes no mention of the house; but also seems to make a distinction between the alleged defamation and the claim to have spoken with the spirit. Yet to be accused of being a ghost seems a strange kind of defamation – unless the defamatory element is the allegation of Henry being a ghost when in fact he wasn't. The earlier statement of the case, however, strongly suggests that the story of the ghostly encounter and the injunction to restore the house is the defamatory statement – Thomas's second court appearance was meant to be to give him the chance to explain why he should not incur excommunication or other canonical punishment on account of the defamation in this manner ('*racione diffamacionem huiusmodi*').

The possibility of attacking a reputation post mortem was often implicit in a range of cases brought in the church courts; notably when challenging the status of marriages and the legitimacy of offspring and thereby imputing 'spiritual crimes' against one or other (or both) of the parties. In many cases the appeal to '*fama*', as a form of common knowledge which also encompassed and impacted on reputation, also meant that numerous cases between parties were in effect defining and redefining that common knowledge for the future. This necessarily entailed some form of de-faming for the losing party, through accusations which were implicitly defamatory because they undermined an existing reputation.[15] A stepson's challenge to his stepmother's dower rights by denying the validity of her marriage to his father was necessarily a posthumous attack on the father's behaviour, and so also an implicit if silent challenge to his reputation.[16] To dispute a marriage in a preceding generation, with neither party still living, in order to bastardise their offspring likewise carries imputations of defamation of the dead.[17] Yet in such cases the 'defamation' passes without comment: those de-famed have no defence in the aftermath of a judicial decision. Explicit references to ecclesiastical court cases as involving defamation of the dead are accordingly rare, but the case against Thomas More is not actually unique.[18] It opens up intriguing possibilities in terms of canon law actions, and the way in which individuals might use the church courts to pursue disputes with non-spiritual implications.

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[13] On defamation in English church courts see Helmholz, *Oxford History*, ch.11; see also R. H. Helmholz, ed., *Select Cases on Defamation to 1600*, Selden Society Publications, 101 (1985), pp. xiv-xli.

[14] The integration of a defamation case into a more concrete and rather different dispute is not uncommon: cf. Helmholz, *Oxford History*, p. 566. The mention of excommunication in More's first appearance might be an indication that the relevant canon law was the constitution of the Council of Oxford of 1222, *Auctoritate dei patris*, in consequence of which 'Defamation meant the imputation of a crime' (Helmholz, *Oxford History*, pp. 572–3).

[15] Cf. Robert N. Swanson, '"... et examinatus dicit": oral and personal history in the records of English ecclesiastical courts', in Michael Goodich, ed., *Voices from the Bench: the Narratives of Lesser Folk in Medieval Trials*, (New York and Basingstoke, 2006), pp. 208-9, 219.

[16] As in BI, Cause Papers, CP.E.108, discussed in Swanson, '"... et examinatus dicit"', pp. 210–14.

The Kelfield case also offers intriguing possibilities for the consideration of credulity, scepticism, and belief in pre-Reformation England. Ostensibly, it suggests an antithesis to the assumptions carried by the survival of the Byland abbey ghost stories: they are presumed to reflect a widespread acceptance of the existence of ghosts; whereas the court action against Thomas More seems to carry with it a rejection of such apparitions, and an official stance which sought to quash such superstition. It seems, also, to mesh with another case about belief in ghosts also brought to the attention of the ecclesiastical authorities: that at Ruardean in Gloucestershire in 1397, when it was alleged against Nicholas Cuthlere that he 'publicly said that the spirit of his father went about at night within the said parish [of Walford]', and that he held vigils on his father's grave at night. Here the charge, being brought at visitation, and with the comment that Cuthlere's behaviour was 'to the great scandal of the catholic faith' (*'in magnum scandalum fidei catholice'*) suggests a communal rejection of his actions as superstition, with the ecclesiastical authorities being invoked to confirm and enforce that response.[19]

That the church authorities should be sceptical of lay contacts with the supernatural world is perhaps to be expected, and is attested in a number of continental instances. But the church also supported ghost stories which served its purpose, as exhortations to moral and spiritual improvement and warnings of the dangers awaiting those who left their repentance too late. This Yorkshire case of 1424, while appearing cut and dried in its judgement on Thomas More and his tale, shares in this ambivalence. Yes, this instance is condemned; but does that necessarily suggest a blanket condemnation of such beliefs? Thomas's claims to have encountered the ghost of Henry FitzHenry clearly had not been totally derided by the society in which he operated. Implicit in the action against him is that the possibility of a ghost returning as he suggested, and of making the kind of demands it made, was not inconceivable; might even be expected. That forthright court action and public penance were deemed appropriate to undermine this particular ghost story carries with it the implication that others might be taken more seriously – perhaps like those of the Byland collection – and that an acceptance of the intersection between the worlds of the living and the dead was more widespread. In this case the story of a spectral return was a defamation of the dead; behind the sentence lies the possibility that others among the dead in similar circumstances won their cases. Yet if they did, the ghosts of their cases have not yet manifested in the archives.

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[17] BI, CP.G.46.

[18] A case from Canterbury in 1397 is cited in Helmholz, *Oxford History*, p. 575 n.30 – likewise brought *ex officio*.

[19] A. T. Bannister, 'Visitation returns of the diocese of Hereford in 1397', *EHR*, 44 (1929), p. 446.

THE TOWER OF ABBOT MARMADUKE HUBY OF FOUNTAINS ABBEY: HUBRIS OR PIETY?

By Michael Carter

The bell tower built by Abbot Marmaduke Huby (1495–1526) at the Cistercian monastery of Fountains has often been regarded as self-aggrandizement. However, a different interpretation is possible when the content of the three bands of inscriptions around the tower's upper storeys are considered. These contain texts from the offices sung at a Cistercian monastery on a Sunday. Several have been adapted to express devotion to the Holy Name of Jesus. The inscriptions, and the identity and location of the three saints' images on the tower, mean that the structure can be interpreted as an expression of Huby's personal devotions and of his dedication to monastic reform.

Marmaduke Huby, abbot of the Cistercian monastery of Fountains in Yorkshire from 1495–1526, has long been the focus of scholarly attention. Generations of antiquarians, archaeologists and historians such as J. R. Walbran, W. H. St J. Hope, D. Knowles, C. H. Talbot, R. Gilyard-Beer and, more recently, G. Coppack and F. Heal, have commented on Huby's reforming vigour and patronage of architecture at Fountains and elsewhere.[1] The most notable example of Huby's archi-

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[1] Archaeological and historical investigation of Fountains Abbey was pioneered by W. H. Walbran and J. T. Fowler: see *Memorials of the Abbey of St Mary of Fountains*, 3 vols, Surtees Society, 42, 67, 130 (1862, 1878, 1918). A detailed architectural description and interpretation of the site was provided by W. H. St-J. Hope, 'Fountains Abbey', *YAJ*, 15 (1900), 269-402. Favourable comments about Huby can be found in the writings of the monastic historians C. H. Talbot, 'Marmaduke Huby, Abbot of Fountains (1495–1526)', *Analecta Sacri Ordinis Cisterciensis*, 20 (1964), 165-84, and D. Knowles, *The Religious Orders in England III: The Tudor Age* (Cambridge, 1970), pp. 35-7. G. Coppack's programme of archaeological investigations conducted in the 1970s and 1980s provided important new insights into the development of the site at Fountains and Huby's own contribution, see R. Gilyard-Beer and G. Coppack, 'Excavations at Fountains Abbey, North Yorkshire, 1979–80: The Early Development of the Monastery', *Archaeologia*, 108 (1986), 147-88. G. Coppack, *Fountains Abbey: The Cistercians in Northern England* (Stroud, 2004) provides a comprehensive and up to date summary of the history and development of Fountains. F. Heal, *Reformation in Britain and Ireland* (Oxford, 2004), p. 49, is an interpretation of the importance of Huby from the perspective of a historian of the Reformation. In researching and writing this article I have accumulated numerous debts of gratitude. My most sincere thanks are extended to Fr Hilary Costello of Mount St Bernard Abbey for answering questions about the Cistercian liturgy. An earlier draft of this research was presented to the Leeds International Medieval Congress in 2009, where it provoked some useful comment and discussion. I am also grateful to the anonymous reviewer for comments on an earlier draft of this article, and for comments and guidance during my research and writing from my PhD supervisor, Prof. David Park of the Courtauld Institute of Art, London. Dr Julian Luxford of the University of St Andrew's, Dr Glyn Coppack of English Heritage, Dr Gerrit Verhoeven of Delft, and Stephen Edwards also read an earlier draft and helped me refine my argument.

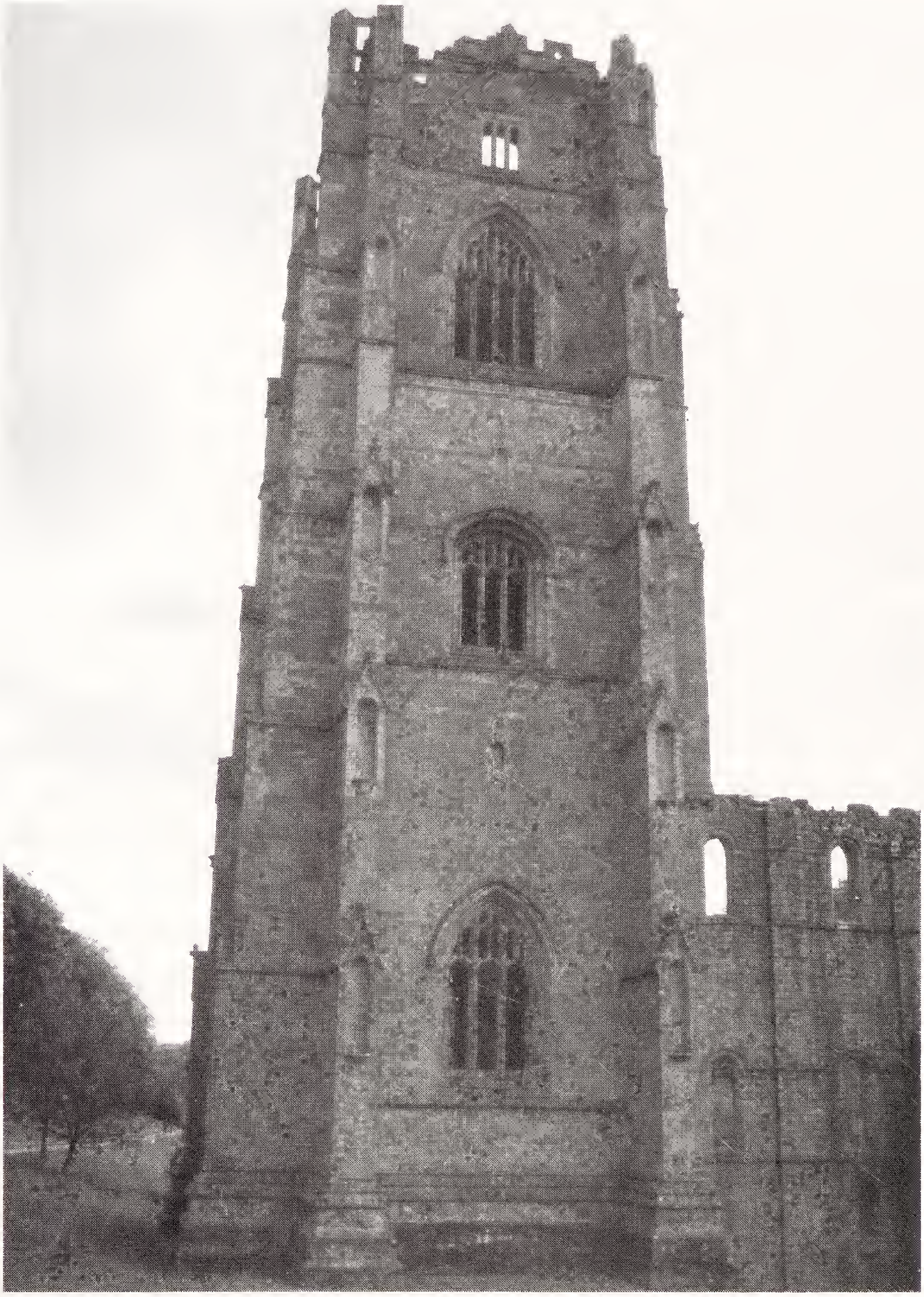

Fig. 1: Huby's tower at Fountains Abbey (photograph, author)

tectural patronage is the late Perpendicular bell tower that dominates the site of the abbey (fig.1). Described in detail by Hope and at the very least mentioned in every significant work on Fountains Abbey, the tower is constructed in four storeys, stands to its original height of forty-eight metres, and is located in an unusual position adjoining the abbey church's north transept.[2] Huby's arms and motto decorate the tower, clearly identifying him as the patron, and three bands of sculpted inscriptions are located around the upper storeys of the tower (fig.2).

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[2] Hope, 'Fountains Abbey', *YAJ*, 15, 313-16.

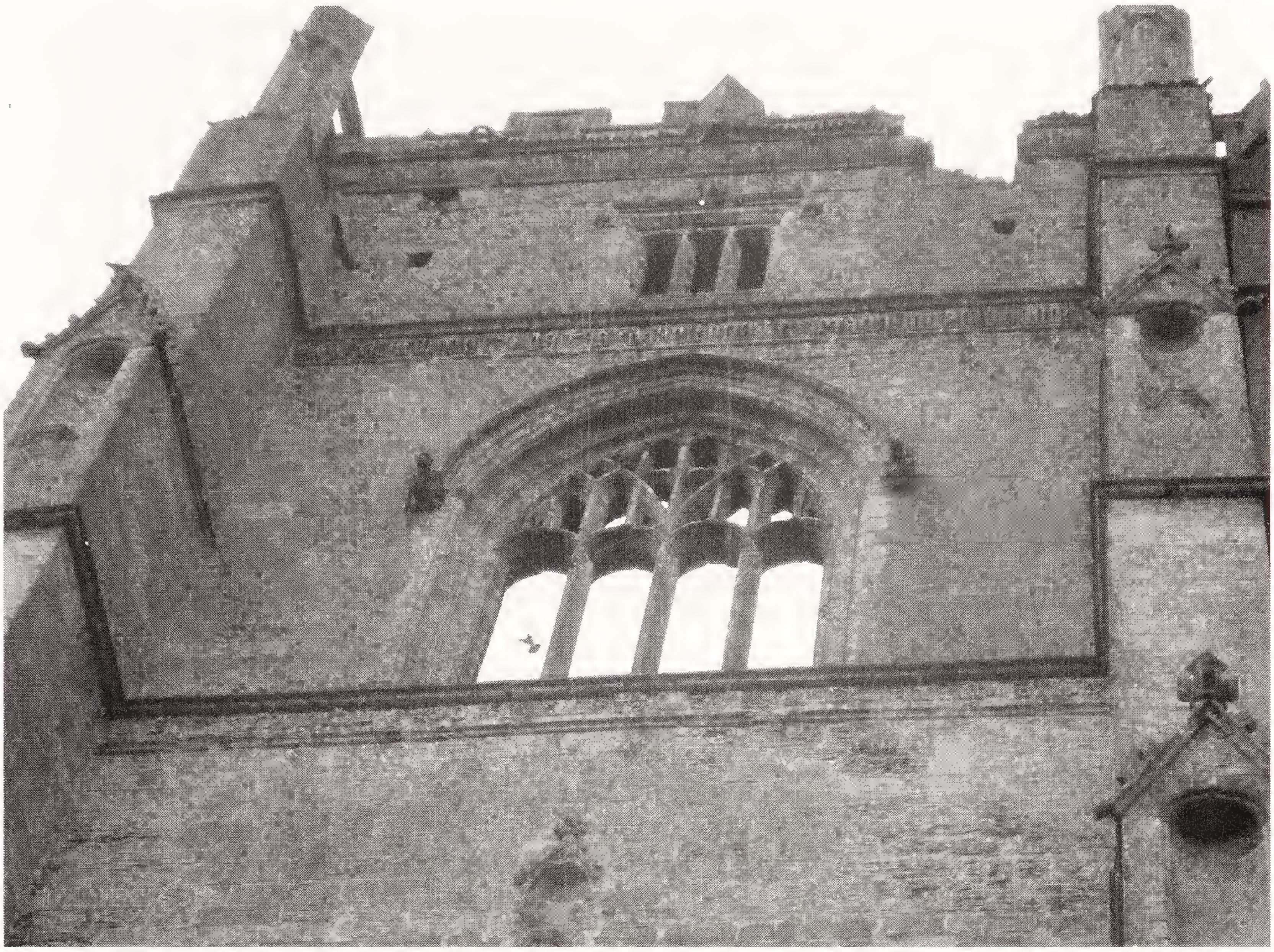

Fig. 2: West face of the tower showing the location of the inscriptions (photograph, author)

These were transcribed by Hope, who recognised them as texts from the Cistercian Breviary. However, other than noting that these inscriptions include Huby's motto, scholars have not previously examined why Huby had these texts sculpted upon his grandest architectural project. Nor has the liturgical and devotional significance of the extant statues that decorate the tower been examined. This article will seek to redress these gaps in the understanding of Fountains Abbey in the late Middle Ages, and in doing so provide some insights into Huby's motivations as a patron as well as into the liturgical and spiritual life of Fountains Abbey at the end of the Middle Ages.

THE CISTERCIAN ATTITUDE TOWARDS TOWER BUILDING

Scholarly literature on Cistercian towers has concentrated on those built in the twelfth century. Early Cistercian legislation forbade the construction of 'extravagant' bell towers. The general chapter of Citeaux decreed in 1157: 'let stone towers with bells not be built'.[3] This prohibition was expanded upon in a codification of Cistercian legislation in 1237 to state: 'let stone towers with bells not be built nor wooden [towers] of extravagant height [be built]',[4] and was repeated in the 1257 codification of the Order's statutes.[5] Lower central crossing towers were, however, tolerated from an early date and were present at a number of English Cistercian monasteries, including Fountains.[6] Towers remained an issue of concern to the Cistercians for much of the thirteenth century.[7] However, the Order's attitudes towards art and architecture evolved significantly in the course of the century. The codification of the Cistercian statues in 1289 replaced earlier legislation on towers with a general decree prohibiting *superfluae novitates et notabiles curiositates* in the Order's buildings. This legislation was again ratified in 1316, and was so vague that it could be interpreted as allowing towers.[8] Evidence of the evolution in the Order's attitude towards tower building is provided by the multi-storey bell towers built at several British Cistercian monasteries in the late Middle Ages.[9]

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[3] *Turres lapideae ad campanas non fiant*. Quoted in C. Norton, 'Table of Cistercian Legislation on Art and Architecture', in *Cistercian Art and Architecture in the British Isles*, ed. C. Norton and D. Park (Cambridge, 1986), p. 328.

HUBY'S TOWER

The tower at Fountains is the grandest bell tower surviving at a Cistercian abbey in England. Its scale means that it is often, with some justification, regarded as an expression of the power and status of both Fountains and Abbot Huby. In the words of Hope, the tower was 'built to impress'.[10] Indeed, in building such a grand tower Huby was acting no differently from contemporary prelates of other orders in northern England, such as Richard Moon, Prior of the Augustinian

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[4] *Turres lapidee ad campanas non fiant, nec lignee altitudinis immoderate.* Quoted in Norton, 'Table of Cistercian Legislation', in *Cistercian Art and Architecture*, p. 368.

[5] Norton, 'Cistercian Legislation', in *Cistercian Art and Architecture*, p. 378.

[6] They are discussed by P. Fergusson , 'Early Cistercian Churches in Yorkshire and the Problem of the Crossing Tower', *Journal of the Society of Architectural Historians*, 29 (1970), 211; S. Harrison, '"I Lift up mine eyes": A Re-evaluation of the Tower in Cistercian Architecture in Britain and Ireland', in *Perspectives for an Architecture of Solitude: Essays on Cistercians, Art and Architecture in Honour of Peter Fergusson*, ed. T. N. Kinder (Turnhout, 2004), pp. 125-35; M. Thurlby, 'The Crossing of Fountains Abbey Church', in *Perspectives for an Architecture of Solitude*, pp. 137-46.

[7] Norton, 'Cistercian legislation', in *Cistercian Art and Architecture*, p. 382.

[8] C. Norton and D. Park, 'Introduction', in *Cistercian Art and Architecture*, p. 8; Norton, 'Cistercian legislation', in *Cistercian Art and Architecture*, pp. 384 and 316.

[9] An early fourteenth-century tower was built at Culross, with Vale Royal erecting a tower in the later fourteenth century, see N. Coldstream, 'Cistercian Architecture from Beaulieu to the Dissolution', in *Cistercian Art and Architecture,* p. 154, n.79. The crossing at Kirkstall, a daughter house of Fountains, was heightened by Huby's contemporary, Abbot William Marshall, see W. H. St-John Hope, *Architectural Description of Kirkstall Abbey*, Thoresby Society, 16 (1907), p. 16. After an attempt to build a crossing tower at Furness failed in the fourteenth century, a western tower was built in the early sixteenth century, see W. H. St-J. Hope, 'The Abbey of St Mary in Furness', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society,* 16 (1900), 231.

[10] Hope, 'Fountains Abbey', *YAJ*, 15, 316.

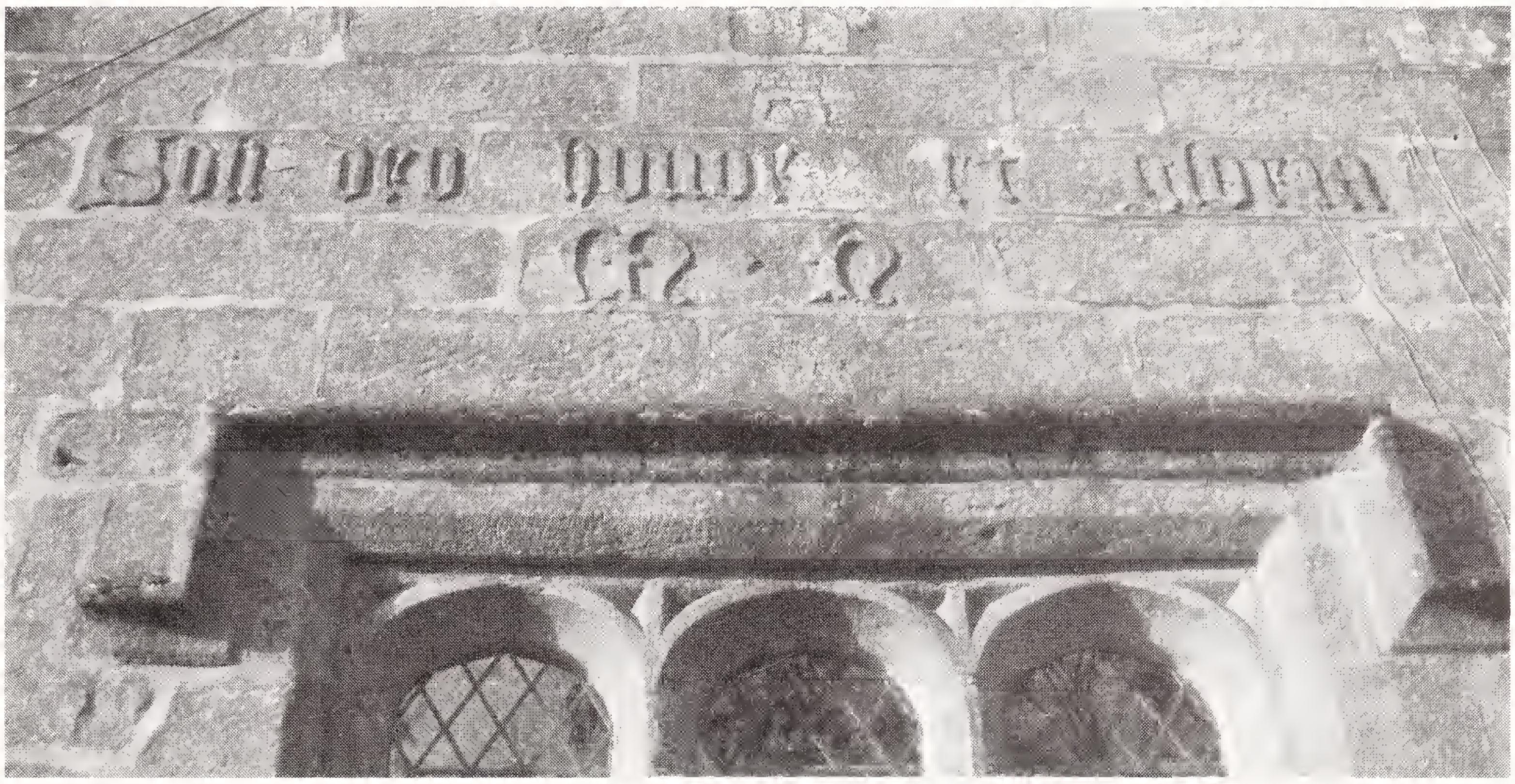

Fig. 3: Huby's motto and initials on the east end of Bewerley Grange chapel (photograph, author)

priory of St Mary, Bolton, who started work on a western tower in 1520.[11] There is nevertheless considerable evidence that Huby, who was *Reformator* of the Cistercian Order in England and Commissary of the abbot of Cîteaux, was deeply devoted to his order and highly conscious of his Cistercian identity. His letters to the Chapter of Cîteaux[12] tell of his efforts to reinvigorate life within the Fountains community which he increased in size from twenty-two to fifty-two members.[13] There is significant physical evidence of Huby's energetic leadership of the monastery at Fountains. He continued the renovation of the abbey church started by Abbot John Greenwell (1441–1471) and continued by his immediate predecessor, Abbot John Darnton (1479–1495).[14] It is possible that Darnton attempted to raise the height of the church's central crossing lantern to provide the abbey with a bell tower. The construction of the central tower was abandoned, however, because of weaknesses in the crossing piers. A tower was instead built in the safe but unusual position adjoining the north transept. There is no doubt that the tower was built during Huby's long abbacy. His arms (a mitre, indicative of the status of the abbots of Fountains, impaled by a crozier with M H either side) are held by an angel above an image niche on the west face of the tower. Furthermore, Huby used his motto, *Soli Deo Honor et Gloria* (To the only God be honour and glory) to indicate his patronage, as at the grange which he rebuilt at Bewerley (fig.3), and this motto is used four times within the inscriptions on the tower. These inscriptions are in a black-letter script and are interspersed with heraldry that probably relates to the abbey's benefactors. The uppermost band is located just below the parapet, the middle band below the string course of the third storey, with the lowest band below the string course at the top of the second storey.

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[11] A. H. Thompson, *History and Architectural Description of the Priory of St Mary-in-Wharfedale*, Thoresby Society, 30 (1924), pp. 154-5.

[12] *Letters from the English Abbots to the Chapter of Cîteaux*, ed. C. H. Talbot, Royal Historical Society, Camden Fourth Series, 4 (1967).

[13] Talbot, *Letters*, pp. 258-60.

[14] Coppack, *Fountains Abbey*, p. 88-91.

Life in a Cistercian monastery was (and still is) regulated by the Rule of St Benedict. Central to the Rule is the stipulation of the structure of the monastic day, which is divided between prayer (the work of God, *opus Dei*, the Divine Office, sung communally in the abbey church), study and labour. It has long been recognised that the texts of the inscriptions on Huby's tower derive from the Offices. Hope suggested that all the texts inscribed on the tower were 'from the Cistercian *Breviarium*, where they occur in the daily offices of Lauds, Prime and Vespers'.[15] In fact, all the texts come from the version of the Office sung on Sundays, specifically Vespers, Vigils (the preferred Cistercian name for Matins), Lauds, Prime and Nones.[16]

Sculpted inscriptions were widely used in the late medieval English church to record patronage, dedications or requests for prayers. A contemporary example close to Fountains is the inscription in English on Prior Moon's tower at Bolton, requesting the mercy of God on his soul.[17] Forde Abbey in Dorset and Holme Cultram Abbey in Cumberland provide Cistercian examples of lengthy sculpted inscriptions from this period. The inscriptions at Forde are located on the entrance tower of the abbot's lodgings.[18] They record, in Latin, that the structure was built by Thomas Charde (1506–1539), Huby's contemporary and fellow Commissary of the abbot of Cîteaux. The inscriptions at Holme Cultram are also the work of a contemporary of Huby, appearing on the porch of the abbey church built by Abbot Robert Chamber (1507–1519). These inscriptions are somewhat closer to those found on the tower at Fountains in that they include liturgical texts. The inscription on the north side of the porch is taken from Vigils for the feast of the consecration of a church and reads *Exultemus Domino qui hunc sanctificavit tabernaculum* (Let us rejoice in the Lord, who has blessed this house). The inscription on the south side of the porch comes from the introit of the mass for the consecration of a church, reading *Non est aliud nisi Domus Dei porta caeli* (This is none other than the house of God, the gate of heaven).[19]

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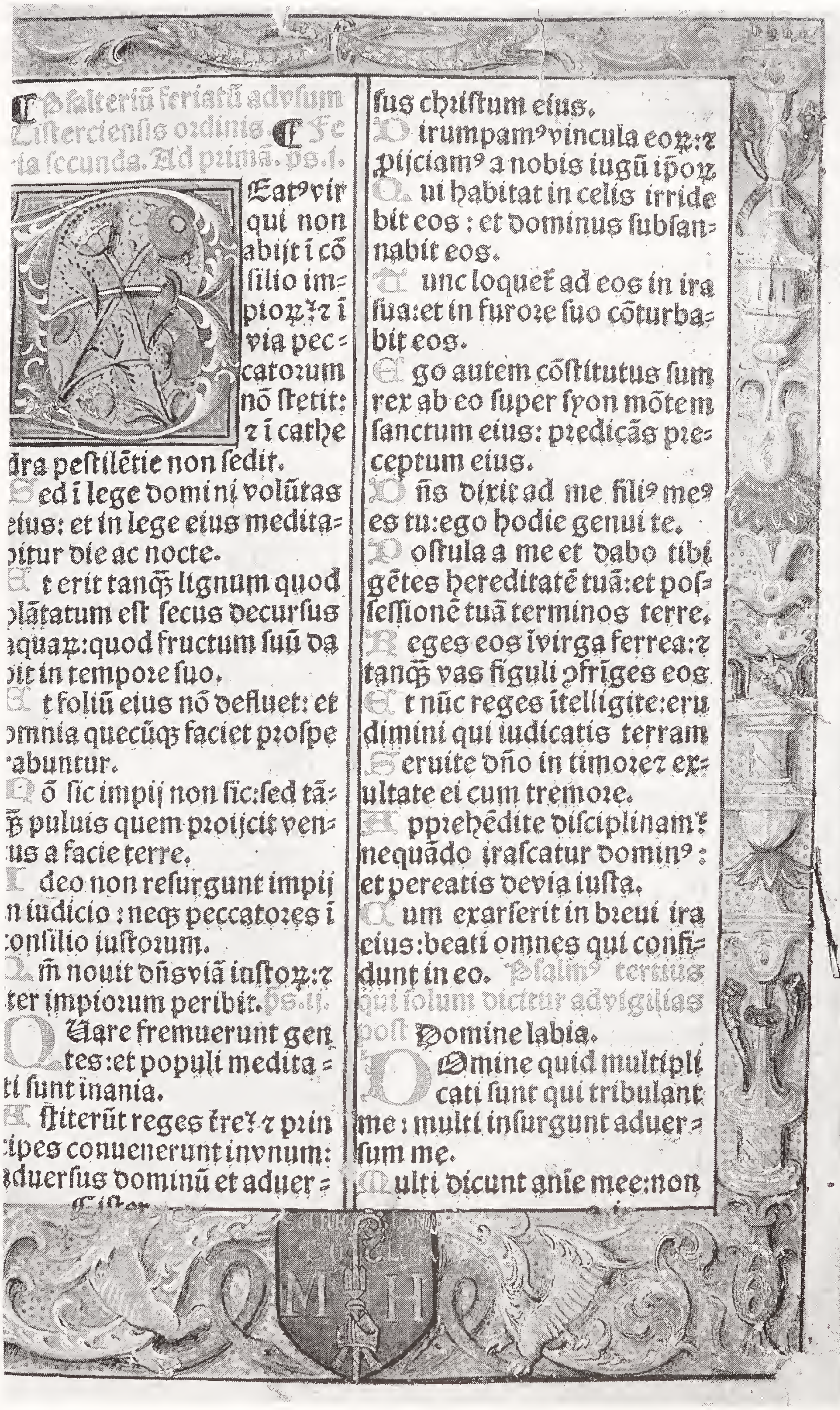
[15] Hope, 'Fountains Abbey', *YAJ*, 15, 316.

[16] I am most grateful to Fr Hilary Costello of Mount St Bernard Abbey for his help in identifying the offices from which the text of the inscriptions derives.

[17] Thompson, *Priory of St Mary-in-Wharfedale*, pp. 154-5.

[18] A. Emery, *Greater Houses of England and Wales 1300–1500, III: Southern England* (Cambridge, 2006), p. 561.

[19] G. E. Gilbanks, *Some Records of a Cistercian Abbey: Holm Cultram, Cumberland* (London, 1899), pp. 120-2.



¶ Pſalteriũ feriatũ ad vſum Ciſtercienſis ordinis ¶ Feria ſecunda. Ad primã. ps. i.

Beat⁹ vir qui non abijt i cõſilio impioꝝ: ꝛ i via peccatorum nõ ſtetit: ꝛ i cathedra peſtilẽtie non ſedit.

Sed i lege domini volũtas eius: et in lege eius meditabitur die ac nocte.

Et erit tanq̃ lignum quod plãtatum eſt ſecus decurſus aquaꝝ: quod fructum ſuũ dabit in tempore ſuo.

Et foliũ eius nõ defluet: et omnia quecũq̃ faciet proſperabuntur.

Nõ ſic impij non ſic: ſed tanq̃ puluis quem proijcit ventus a facie terre.

Ideo non reſurgunt impij in iudicio: neq̃ peccatores i conſilio iuſtorum.

Qm̃ nouit dñs viã iuſtoꝝ: ꝛ iter impiorum peribit. ps. ij.

Quare fremuerunt gentes: et populi meditati ſunt inania.

Aſtiterũt reges tre ꝛ principes conuenerunt invnum: aduerſus dominũ et aduerſus chriſtum eius.

Dirumpam⁹ vincula eoꝝ: ꝛ ꝓiciam⁹ a nobis iugũ ipoꝝ.

Qui habitat in celis irridebit eos: et dominus ſubſannabit eos.

Tunc loquet̃ ad eos in ira ſua: et in furore ſuo cõturbabit eos.

Ego autem cõſtitutus ſum rex ab eo ſuper ſyon mõtem ſanctum eius: predicãs preceptum eius.

Dñs dixit ad me fili⁹ me⁹ es tu: ego hodie genui te.

Poſtula a me et dabo tibi gẽtes hereditatẽ tuã: et poſſeſſionẽ tuã terminos terre.

Reges eos ivirga ferrea: ꝛ tanq̃ vas figuli ꝯfriges eos.

Et nũc reges itelligite: erudimini qui iudicatis terram.

Seruite dño in timore ꝛ exultate ei cum tremore.

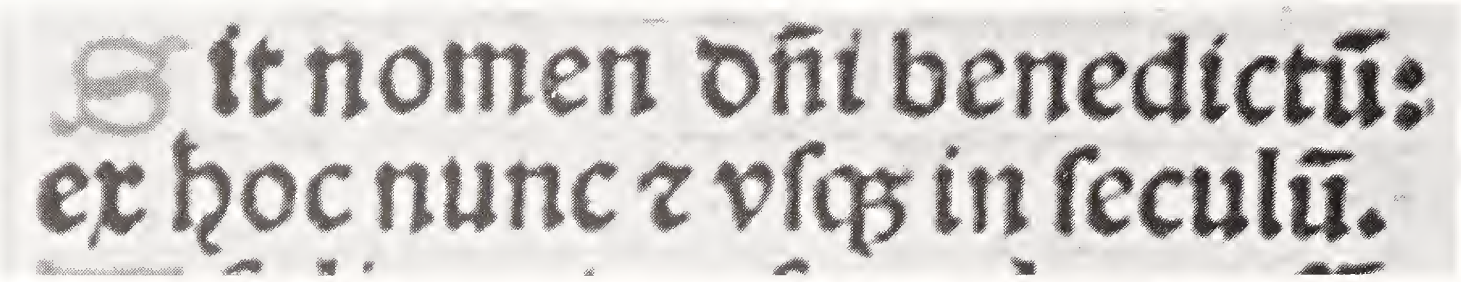
Apprehẽdite diſciplinam ne quãdo iraſcatur domin⁹: et pereatis de via iuſta.

Cum exarſerit in breui ira eius: beati omnes qui confidunt in eo. Pſalm⁹ tertius qui ſolum dictur ad vigilias poſt Domine labia.

Domine quid multiplicati ſunt qui tribulant me: multi inſurgunt aduerſum me.

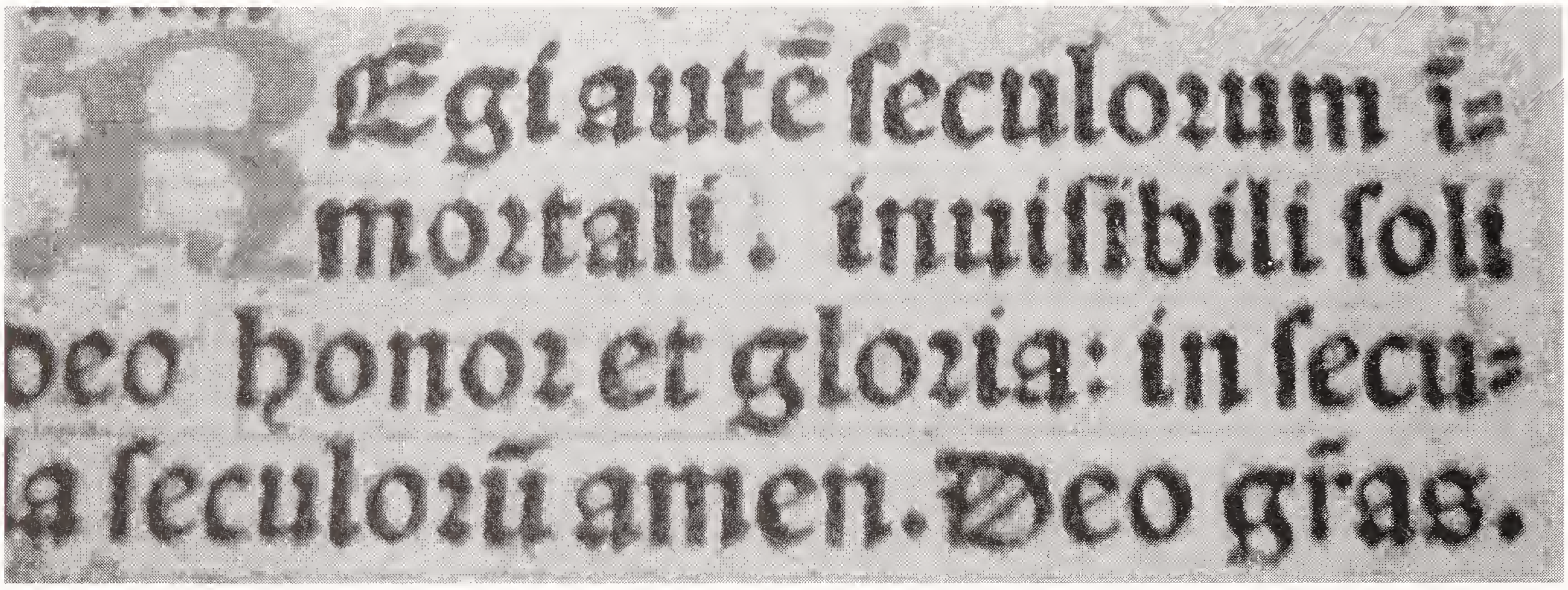
Multi dicunt anĩe mee: non

Fig. 4: Opening page of the Psalter from Huby's Breviary (f.a1r) (Reproduced with the permission of the Governing Body of Christ Church, Oxford)



Sit nomen dñi benedictũ:
ex hoc nunc ⁊ vſqꝫ in ſeculũ.

Fig. 5: Text from Psalm 113.2 sung at Vespers on a Sunday from Huby's Breviary (f.f3r) (Reproduced with the permission of the Governing Body of Christ Church, Oxford)



Regi autē ſeculoꝛum ī=
moꝛtali. inuiſibili ſoli
deo honoꝛ et gloꝛia: in ſecu=
la ſeculoꝛũ amen. Deo grãs.

Fig. 6: Text from 1 Timothy 1.17 sung at Prime on a Sunday from Huby's Breviary (f.f5v) (Reproduced with the permission of the Governing Body of Christ Church, Oxford)

In order to explain the significance of the texts on Huby's tower it is first necessary to understand the constitution of the Sunday liturgy at late medieval Fountains.[20] The first office of the Sabbath was Vespers, sung on a Saturday afternoon. This is because the liturgical structure of Sundays and feast days followed the Jewish tradition and started at sunset on the preceding day.[21] The following office was Compline, after which the monks went to bed, to be awoken for the night office of Vigils. This was followed by Lauds at dawn. The next office was Prime, sung at sunrise, after which the community would celebrate the first of the two Sunday conventual masses. Terce followed, after which the Sunday high mass would be celebrated. Sext, Nones, the second Vespers of Sunday and Compline completed the liturgical day. The community was summoned to each of these offices and masses by the bells hanging in the abbey church.[22]

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[20] This is based on the reconstruction of the Cistercian day provided in T. N. Kinder, *Cistercian Europe* (Kalamazoo, 2002), pp. 55-8.

[21] For an explanation, see A. Hughes, *Medieval Manuscripts for Mass and Office a Guide to their Organization and Terminology* (London, 1995), p. 68.

[22] Kinder, *Cistercian Europe*, p. 57. An exception was the Easter season from Holy Thursday to mass at Paschal Vigil on Easter Sunday when a wooden tablet was struck using a mallet. See, Kinder, *Cistercian Europe*, p. 57.

The texts of all the offices are contained in the Breviary, a compendium of the offices to be recited throughout the liturgical year. Huby's own Breviary has survived and is in the library of Christ Church, Oxford.[23] It was printed for the Cistercian rite in Paris in c.1520 by Jean Kerbriand and has sumptuous illuminations in the Renaissance style (fig.4). These illuminations are consistent with Parisian work and are the only substantial example of Renaissance ornament associated with Huby.[24]

It is significant that all the texts inscribed upon the tower come from the Offices sung on Sunday, which was a day of special devotion and solemnity in a monastery. Indeed, the rule of St Benedict provides instructions for the recital of Vigils and Lauds on a Sunday,[25] and it is notable that texts from both these offices appear on the tower. The texts appear to have been deliberately selected by Huby for the tower to symbolise the importance of the Sunday offices for the convent. It is therefore worth demonstrating the relationship between the sculpted texts and the Cistercian Breviary. The inscriptions in the upper band are all badly eroded and now largely illegible. However, Hope partially transcribed some of them at the turn of the twentieth century.[26] The inscription on the east face was transcribed by Hope as follows : *Sit nomen dom[ini] ih[es]u xpi benedictum [ex hoc nunc et usque in secula]* (Blessed be the name of the Lord Jesus Christ from this time forth and evermore). This text is an adaptation of Psalm 113:2, sung at vespers on a Sunday and can be found in Huby's Breviary (quire f, f. 3r.) (fig.5). The adaptation to include mention of the name of Jesus is noteworthy, since, as will be discussed below, this makes the text an expression of devotion to the Holy Name of Jesus. Hope transcribed the inscription on the north side as reading: *In no[m]ine ih[e] su xpi…g…autur…[i]nf[er]nor[um]* (the complete text being *In nomine Ihesu Christi omne genu flectatur celestium terrestrium et infernorum*. Translated as 'At the name of Jesus Christ every knee should bow, of things in heaven, and things in earth, and things under the earth', this text comes from Philippians 2:10. It was sung as an antiphon in the night office of Vigils and can be found in Huby's Breviary (quire e, f. 6v.). It was also sung at the conclusion of Nones on Palm Sunday, one of the most solemn Sundays in the liturgical calendar. Moreover, it is the key Pauline text expressing devotion to the Holy Name and, in the York Rite, forms the introit for the mass of this feast.[27]

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[23] N. R. Ker, *Medieval Libraries of Great Britain: A List of Surviving Books* (London, 1941), p. 49. Christ Church, e.8.29.

[24] M. Carter, 'The Breviary of Abbot Marmaduke Huby: Renaissance Design and Religious Change in Early Sixteenth-Century Yorkshire', *Bodleian Library Record*, 21 (2009), 17-34.

[25] Rule of St Benedict, chapters 11 and 12.

[26] Hope, 'Fountains Abbey', *YAJ*, 15, 345-16.

[27] *Missale ad Usum Insignis Ecclesiae Eboracensis: II*, ed. W. Henderson, Surtees Society, 60 (1870), p. 216.

The text on the west side of the tower was transcribed as: *Benedicamus p[at]rem & fil[ium] cu[m] s[a]nc[to] sp[irit]u laudem[us] et sup[er] exaltem[us] eum in secula.* The translation is 'Let us bless the Father and the Son and the Holy Spirit; let us praise Him and exalt Him for ever.' This text is from Daniel 3:57-58 in the Vulgate and was sung as the canticle at the end of Lauds on a Sunday. Once again, the text can be found in Huby's Breviary (quire h, f. 4r.). On the south side of the tower, however, the texts were very badly eroded even at Hope's time, and he was able to make only a partial transcription: *...& d...ni..celi...stia.* The absence of a complete word means that efforts to identify a possible source for this inscription have so far proved fruitless.

The middle band of inscriptions is located at the top of the third storey. The texts on the east and north sides run together and read: (east) *Benediccio et claritas et sapiencia et graciarum accio honor;* (north) *Et fortitudo deo nostro in secula seculorum amen.* The translation is 'Blessing, and glory, and wisdom, and thanksgiving, and honour, and power, and might be unto our God for ever and ever. Amen.' This text comes from Revelation 7:12. As with the text of the upper band of inscriptions on the west face, this was sung at Lauds and is present in Huby's Breviary (quire b, f. 3v.). The texts on the west and south sides also run together and read: (west) *Regi autem seculorum immortali invisibili*; (south) *Soli deo honor et gloria in secula seculorum amen.* These are translated: 'Now unto the King eternal, immortal, invisible, the only God be honour and glory for ever and ever. Amen.' In this case the source is 1 Timothy 1:17, sung at Prime on a Sunday. The text contains Huby's motto, *Soli Deo Honor et Gloria*; and once again is found in his Breviary (quire f, f. 5v.) (fig. 6).

The lower band of inscriptions is located at the top of the second storey. The inscription on the east side reads: *Soli deo ihesu xpo honor et gloria in sec[u]la seculor[u]m*; that on the north reads *Soli deo ihesu xpo honor et gl[or]ia sec[u]la sec[u]lor[u]m am[en]*; and that on the west reads *Soli deo ih[es]u xpo honor et gl[or]ia in sec[u]la sec[u]lor[u]m.* There are no inscriptions on the south face of the tower because of the pitch of the roof. All three of the inscriptions at this level can be translated: 'To the only God Jesus Christ be honour and glory for ever and ever. Amen.' This is a variation on Huby's motto found in the middle band of inscriptions on the south side. It is of note that all these inscriptions include the name of Jesus, and thus, as with some of the inscriptions in the upper band, express devotion to the Holy Name.

It is highly significant that Huby had these inscriptions from the Sunday liturgy placed on his bell tower. The bells of a monastery were used to regulate the life of the abbey, one of their most important functions being the summoning of the community to the observation of the Offices. Observing the rhythm of the monastic bells was regarded as highly important by reforming Cistercian abbots in the late Middle Ages. In 1526 the monks of Thame Abbey were reminded by their visitor that: 'All and everyone will come together in the church after the usual sound (i.e. ringing of the bell) to sing the Salve Regina ... and when this is sung ... will go to the dormitory, where they will lie asleep until the ringing of vigils.'[28] Furthermore, placing the inscriptions at the top of the tower meant that they were in proximity to the bells that summoned the community to offices containing the relevant texts. Huby's motto, Soli Deo Honor et Gloria, occurs within the inscriptions above and below the third storey, the tower's ringing chamber. Significantly, this motto, which was common in the late Middle Ages, is sometimes found on late medieval bells, as on the one at Llandaff Cathedral.[29] It is possible that the very bell that announced the offices at Fountains was also inscribed with Huby's motto.

DEVOTION TO THE HOLY NAME

As well as demonstrating the importance that Huby attached to the dignified observation of the Offices, the inscriptions also provide interesting evidence of his devotions. As already noted, several of the inscriptions express devotion to the Holy Name of Jesus. The cult of the Holy Name was widespread across late medieval Europe, being particularly popular in England. The Cistercians played an important role in the development of the cult. St Bernard of Clairvaux, in his fifteenth sermon on the Song of Songs, expressed devotion to the Holy Name and was an early and influential proponent of the cult.[30] Moreover, an English Cistercian has been suggested as the author of the hymn *Jesu dulcis memoria*.[31] This hymn has been called 'the most famous medieval meditation on the sweetness of Jesus.'[32] Devotion to the Holy Name was popularised in England by the writings of the Yorkshire hermit, Richard Rolle (d.1349), who developed the teachings of St Bernard and was deeply affected by the spiritual traditions of the Yorkshire Cistercians, especially their affection for Christ.[33] By 1500 the cult was well established in northern England, as demonstrated by the presence of a Jesus Altar at Durham Cathedral and a collegiate foundation of the same dedication at Rotherham.[34]

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[28] *Omnesquoque et singuli, hiis solummodo exceptis, quos apud se justa causa monasterii abbas retinere volueri, ad Salve Regina post completorium in ecclesia decantari consuetum ad sonitum convenient, chorumque intrent beatissimae Dei genetrici obsequium gratum obtaturi, quo decanto, aqua benedicta primitus aspersi dormitorium petant frates, ubi usque ad vigiliarum pulsationem ullo absque egressu,* G.G. Perry, 'Visitation of the Monastery of Thame, 1526', *English Historical Review* [*EHR*], 3 (1888), 713. I am grateful to Dr Gerrit Verhoeven for his assistance in translating the Latin.

[29] H. B. Walter, *Church Bells of England* (Oxford, 1912), p. 319.

[30] P. R. Biassiotto, *History of the Development of Devotion to the Holy Name* (New York, 1943), p. 27; C. A. Carsley, 'Devotion to the Holy Name. Late Medieval Piety in England', *Princeton University Library Chronicle*, 53 (1992), 160.

[31] F. J. E. Raby, *A History of Christian Latin Poetry from the Beginnings to the Close of the Middle Ages*, 2nd edition (Oxford, 1953), p. 329.

[32] Carsley, 'Devotion to the Holy Name', *Princeton University Library Chronicle*, 53, 161.

[33] For the importance of the Cistercians to the development of Rolle's spirituality and devotion to the Holy Name see: N. Watson, *Richard Rolle and the Invention of Authority* (Cambridge, 1991), p. 55; E. A. New, 'The Cult of the Holy Name of Jesus in Late Medieval England, with Special Reference to the Fraternity of St Paul's Cathedral, London, c.1450–1558' (PhD thesis, University of London, 1999), pp. 12 and 24.

The focus of devotion to the Holy Name in late medieval England was originally a votive mass celebrated on a Friday. The liturgical feast of the Holy Name was promulgated in the province of Canterbury in 1488 for 7 August, the province of York adopting the feast on the same day in the following year.[35] One scholar has recently suggested that by 1500 the liturgical observation of the feast of the Holy Name was kept at 'the average parish church and certainly in great collegiate and monastic churches.'[36] Despite St Bernard's importance in the development of the cult of the Holy Name, the Cistercian Order did not officially adopt this feast day until 1644.[37] Other than the inscriptions, there is only very limited evidence of devotion to the Holy Name at Fountains. An IHS monogram, the key iconographic emblem of the cult of the Holy Name, was etched into one of the cells beneath the abbot's lodgings rebuilt by Darnton.[38]

It is also noteworthy that the inscriptions expressing devotion to the Holy Name, most importantly the variations on Huby's motto, are in close proximity to the bells. As already noted, bells in the Middle Ages were frequently inscribed and often named. Naming a bell 'Jesus' was an expression of devotion to the Holy Name from the late fourteenth century. Its tolling was thought to symbolise the speaking of the Name of Jesus.[39] At least one Cistercian abbey with a close association with Fountains had a Jesus bell. The Chronicle of Meaux Abbey, a daughter house of Fountains in the East Riding, records that the abbey acquired a bell named Jesus between 1346 and1369.[40] This was the period when the cult of the Holy Name was first becoming established in Yorkshire largely through the support of the nobility, such as Henry, Lord Scrope of Masham, whose family were patrons of the Cistercians at Rievaulx.[41] It is also possible that Fountains itself possessed a Jesus bell. A bell at St Mary's, Thirsk, is inscribed with the name of Jesus and the date 1410, and is purported to originate from Fountains.[42]

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[34] J. Hughes, *Pastors and Visionaries: Religion and Secular Life in Late Medieval Yorkshire* (Woodbridge, 1988), pp. 207 and 266; New, 'Cult of the Holy Name', p. 42. Evidence for a Jesus Altar at a Cistercian monastery comes from the Dissolution inventory of Garendon Abbey, Leicestershire. This records that there was an altar with that dedication in the monastery's church, upon which were thirteen images, see J. Nichols, *The History and Antiquities of the Country of Leicester,* vol. 3(2) (London, 1795–1815), p. 797.

[35] R. W. Pfaff, *New Liturgical Feasts in Later Medieval England* (Oxford, 1970), p. 77.

[36] J. Brantley, *Reading in the Wilderness: Private Devotion and Public Performance in Late Medieval England* (London, 2007), p. 47.

[37] A. Cabassut, 'La Devotion au Nome de Jesus dans l'Eglise d'Occident', *La Vie Spirituelle*, 86 (1952), 48.

[38] Hope, 'Fountains Abbey', *YAJ*, 15, 337.

[39] New, 'Cult of the Holy Name', p. 60.

[40] *Chronica Monasterii de Melsa, III.* ed E. A Bond, Rolls Series, 43 (1868), p. 240.

[41] New, 'Cult of the Holy Name' p. 26.

[42] Walbran, *Memorials*, vol.1, p. 294.

IMAGES ON THE TOWER AND THE CISTERCIAN CALENDAR

The influence of the liturgy on the design and decoration of the tower is further suggested by the identity and location of the surviving images upon it. There are seven image niches on the facades of the tower (two each on the eastern, northern and western facades, and one on the southern facade). A further twenty-six image niches are located in the tower buttresses, but they appear never to have been filled.

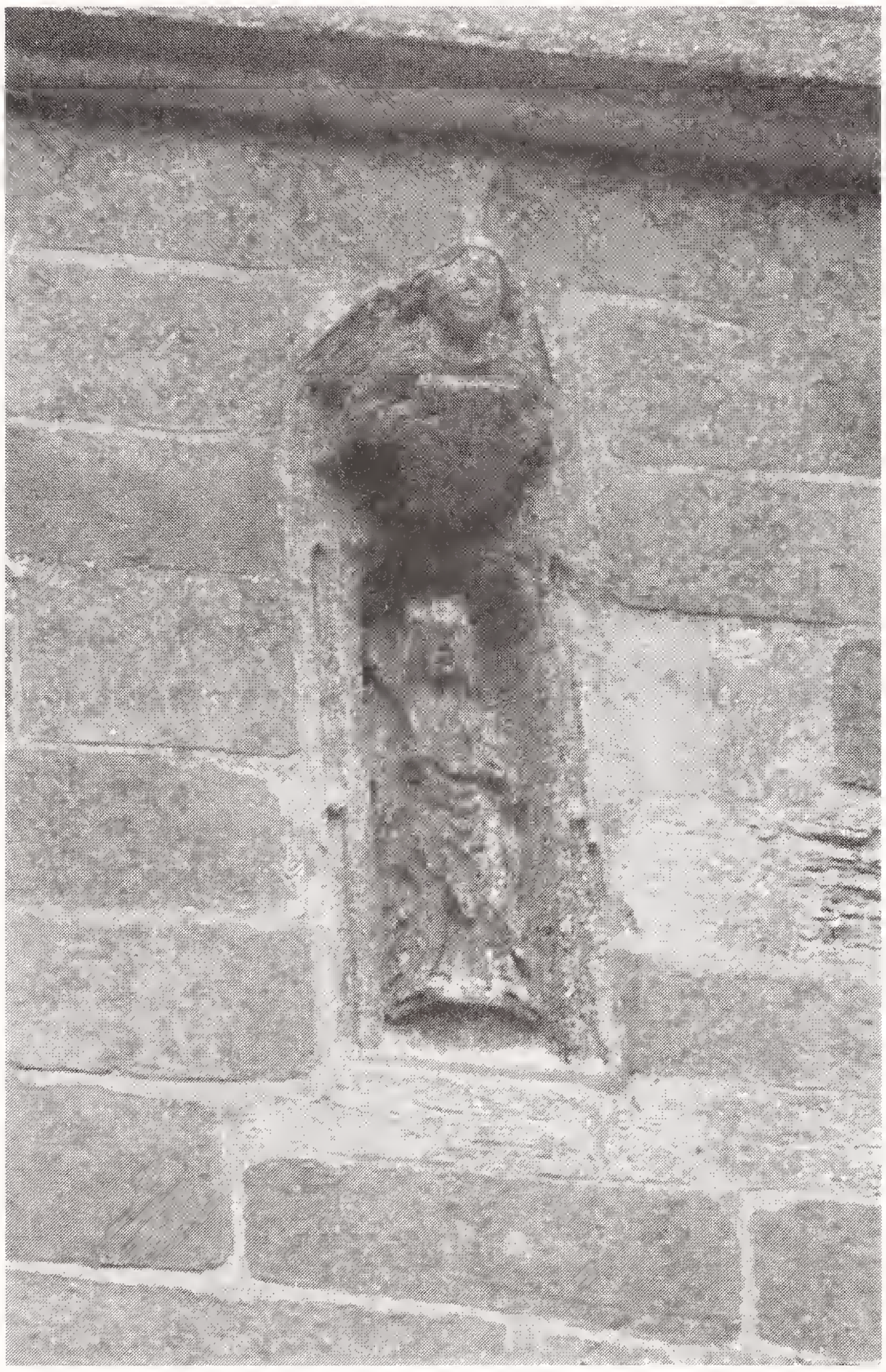

Fig. 7: Image of a female martyr saint, traditionally identified as St Katherine, on the north face of the tower (photograph, David Napier)

Three images are still in situ. Two occupy the image niches on the northern facade. The first is located above the lowest window and is of a female saint who is crowned, an indication of both martyrdom and royalty, holding a palm of martyrdom in her right hand and a book, an indication of her learning, in her left (fig. 7). On the basis of these attributes, Hope identified her as St Katherine.[43] The statue has neither the wheel nor sword with which the saint is usually depicted, and the attributes of crown, book and palm were shared with other virgin martyrs. Nevertheless, as will be explained below, Cistercian devotions in the late Middle Ages suggest that the image is indeed most likely to be St Katherine.

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[43] Hope, 'Fountains Abbey', *YAJ*, 15, 314.

The second statue on the northern façade is housed in an image niche above the window of the second storey. The image is a typical late medieval representation of St James the Great, showing the saint holding a pilgrim's staff and wearing a pilgrim's gown and hat. There is significant other evidence of late medieval devotion to St James at Fountains, an altar being dedicated to the saint in the Chapel of the Nine Altars. Abbot John Darnton (1478–1495) inserted an image of the saint carved upon a keystone in the arch of a window above this altar.[44] An inventory taken just before the Dissolution shows that the abbey possessed a silver-gilt image of the saint valued at £13 7s. 4d.[45] Six late medieval cockleshell-shaped pilgrims' ampullae from Fountains are further evidence of devotion to the cult of St James and perhaps indicate that members of the community made pilgrimages to the shrine of the saint at Santiago de Compostela.[46]

The final image is situated in the only image niche on the southern facade of the tower, above the third storey window. It shows an abbot holding a crozier in his right hand and a book in his left (fig. 8). Various identities have been suggested for this image: St Bernard, St Benedict, or even Huby.[47] Certain identification is impossible, but since the statue is so similar to other late medieval sculptural representation of St Bernard, such as the late fifteenth-century statue from the Cistercian abbey of Fontaine-les-Dijon in France,[48] it seems plausible that the Fountains image is a representation of this great Cistercian saint.

Fewer saints were commemorated in the calendar of the Cistercians than in those of other orders, but St Katherine, St James the Great and St Bernard all appear in the calendar of Huby's Breviary. The feast of St Katherine is 25 November, St James the Great is 25 July, and St Bernard is 20 August. Huby's Breviary also contains special offices for the feast days of these saints (St Katherine, quire N, f. 2v.; St James the Great, quire O, ff. 2r.-3v.; St Bernard, quire O, ff. 3v.-6v.). The calendar of the Cistercian Breviary provides instructions about the degree of solemnity with which the feasts of these saints should be observed. The Order carefully graded the status of saints' days in its calendar. The lowest status was a

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[44] Hope, 'Fountains Abbey', *YAJ*, 15, 296; Coppack, Fountains Abbey, fig. 64, p. 90.

[45] Walbran, *Memorials*, vol.1, p. 290.

[46] J. Geddes, 'Cistercian metalwork in England', in Cistercian Art and Architecture, p. 262 records that one lead ampulla was recovered from Fountains, and I am grateful to Susan Harrison of English Heritage for alerting me to the existence of further examples. There are numerous examples of contemporary Benedictine monks making the pilgrimage to Santiago, see J. Luxford, *The Art and Architecture of English Benedictine Monasteries, 1300–1500: A Patronage History* (Woodbridge, 2005), p. 131.

[47] Hope, 'Fountains Abbey', *YAJ*, 15, 314.

[48] Illustrated in J. France, *Medieval Images of St Bernard of Clairvaux* (Kalamazoo, 2007), fig.3, p. 20.

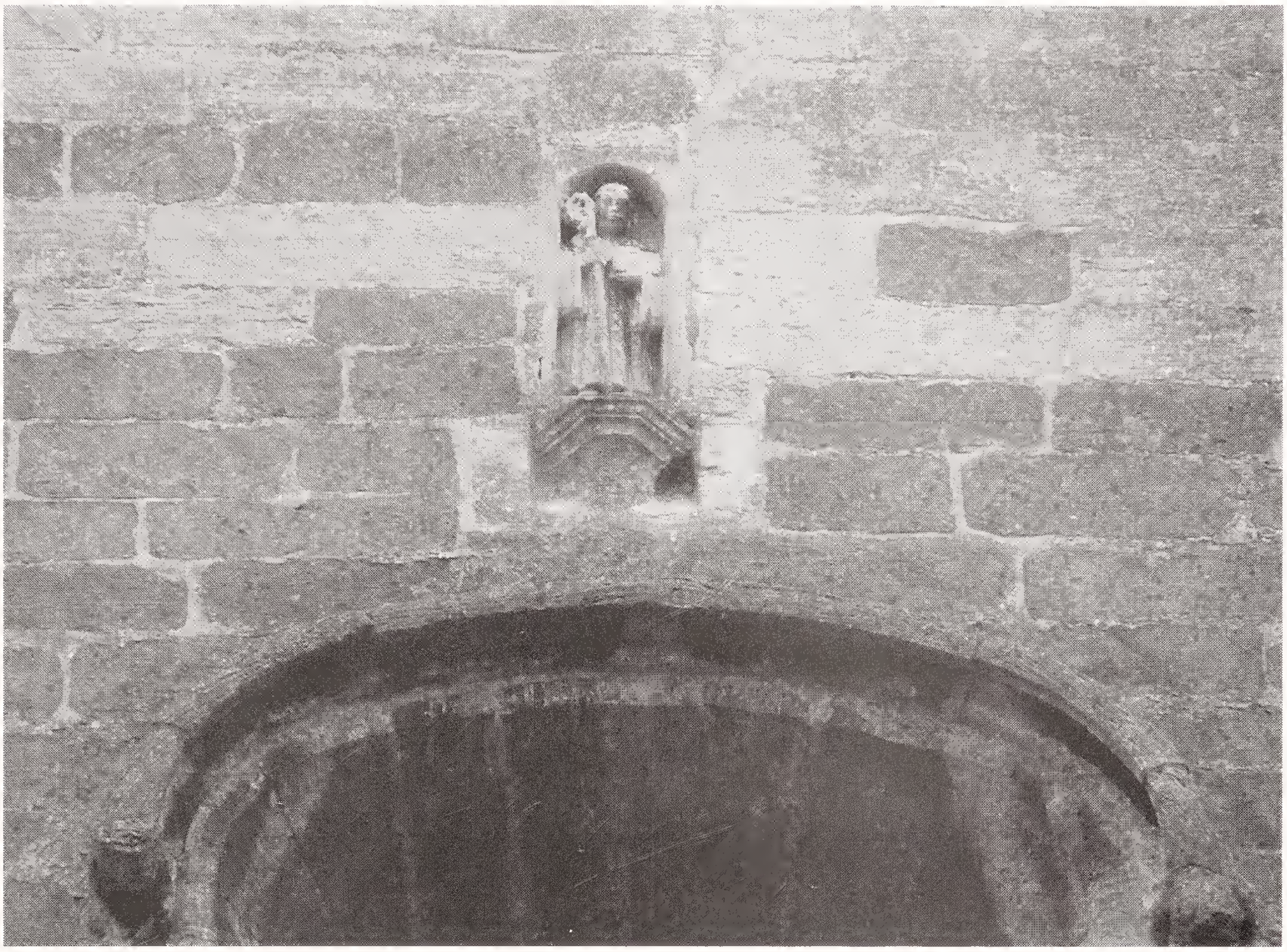

Fig. 8: Image of an abbot saint, possibly St Bernard, on the south face of the tower (photograph, David Napier)

simple commemoration. Next in rank was a feast marked with one conventual mass, indicated by the placing of a single M next to it in the calendar. Of higher status were feasts honoured with two conventual masses, shown by placing MM next to the name of the saint. The calendar records that St Katherine's feast was of this rank. The fact that no other virgin martyr's feast has such high status supports the identification of the image on the tower as that of St Katherine. Of even greater rank were feasts with two conventual masses that also had a procession, indicated by placing a cross next to MM. The feast of St James the Great had this status. Higher still in status were feasts that were celebrated by the preaching of a sermon to the assembled community after the daily chapter meeting. These feasts are indicated by Sermo in the calendar. Sermon feasts with a procession were of a higher status still and were indicated by placing a cross after Sermo. Feasts of the highest status of all, including that of St Bernard, were honoured by an octave, an additional celebration of the feast with one conventual mass eight days later.[49]

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[49] For an explanation of the rank of Cistercian feasts see A. A. King, *Liturgies of the Religious Orders* (London, 1955), p. 99. The description provided here is also based on correspondence with Fr Hilary Costello, to whom I am grateful, for clarifying certain points.

Although the evidence is admittedly incomplete in that only three statues are extant, the physical position of the statues on the tower seems to be related to the status of the feast of the saint they each represent. The image of St Katherine, whose feast had the lowest status of all the saints represented by the surviving images on the tower, is located at a lower level than St James, who in turn is placed lower than the image of St Bernard whose feast were celebrated with the greatest solemnity of all. Also significant is the positioning of the statue of St Bernard on the south face of the tower. This was a highly appropriate position for an image of the Order's greatest saint, as such a location meant that the likeness overlooked, and could be seen from, the claustral nucleus of the abbey, a constant reminder of his importance in guiding the daily life of the community.

THE IMPORTANCE OF THE OFFICES TO CISTERCIAN REFORMERS

This physical evidence demonstrating Huby's preoccupation with the offices and the liturgy is supported by documentary evidence that testifies to Huby's activities as a monastic reformer. Even before his election as abbot of Fountains, Huby reformed a number of monasteries in Wales.[50] Soon after his election to the abbacy of Fountains he was appointed a Commissary of the abbot of Cîteaux and, and as noted previously, Reformator of the Order in England. In 1517, William Helmsley (1513–1528), abbot of the nearby Cistercian monastery of Rievaulx, wrote to the abbot of Cîteaux asking to be allowed to join Huby as a Reformer of the Order, noting the many 'good things' Huby had undertaken at Fountains, where he was 'the cultivator of discipline, the planter of piety ... and the new repairer of his church'.[51] Evidence from late medieval Cistercian visitations demonstrates the importance that a reforming abbot such as Huby attached to the correct observation of the rule of St Benedict and the dignified observation of the daily offices. In 1526 the visitor of the Cistercian abbey of Thame found that the observation of the monastic rule in the abbey was very lax. He commented:

> Although it is adequately stated as well in the rule of Saint Benedict as in canon law that monks of our order have to gather for the divine offices (that is to say day and night) and to read and sing Psalms there (things however that are sometimes forgotten) we want and order that all and everyone of the monks of the forementioned monastery set themselves with austerity and modesty, humbly and piously to attend all the usual and compulsory hours to execute the divine offices.

He continued:

> These divine offices should be sung together with sincere devotion, slowly and religiously, and should be celebrated in this house... according to the

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[50] Talbot, 'Marmaduke Huby', *Analecta Sacri Ordinis Cisterciensis*, 167.

[51] Talbot, 'Marmaduke Huby', *Analecta Sacri Ordinis Cisterciensis*, 172.

> model of the blessed father Bernard and the rule in our mother house of Cîteaux, observing it without violations, not hurrying.[52]

Just as Cistercian architecture evolved during the course of the Middle Ages, so too did the Order's devotions. The Holy Name was far from being the only unofficial devotion that Huby adopted at Fountains. In 1495, he sought the permission of Cîteaux to celebrate the feast of St Oswald at the abbey, asking a year later for authorisation for its observation at all of Fountains' daughter houses and Cistercian abbeys in the province of York.[53] There are manuscript annotations in the calendar of Huby's Breviary inserting the feast of St Oswald on 5 July (quire A, f. 8r.), and St Edmund on 20 November (quire B, f. 2r.). The calendar has also been amended to include mention of numerous other English saints, including St. John of Beverley on 8 May (quire A, f. 7r.), St William of York on 8 June (quire A, f. 7v.) and St Wilfrid on 12 October (quire A, f. 9v.).

Huby's tower appears to have been built with an eye to the topography of the site. Its ringing chamber rises above the slopes of the Skell valley, and the sound of its bells would have resonated across the abbey's estates. The peal would doubtless have been as impressive as the physical presence of the tower, of which the inscriptions and surviving statues are visual manifestations of Huby's dedication to monastic reform, the correct observation of the Cisterican liturgy, and devotion to the Holy Name.

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[52] *Imprimis, licet autem satis tam in regula divi Benedicti quam in jure sit provisum quomodo monachi nostri ordinis convenire debeant ad divina officia (diurnalia videlicet et nocturna) necnon legere et psallere in eisdem (quae tamen haec negligenter omittuntur interdum) volumus et etiam ordinamus ut universi singuli monachi predicti monasterii cum gravitate et modestia humiliter et devote singulis horis consuetis et debitis ad divina officia persolvenda interesse studeant…Ipsaque divina officia cum devocione sincera, tractim, distincte concinantur, et debite celebrentur in hac domo, melius solito, juxta beati patris Bernardi formam et regulam in materna nostra domo Cistercii, inviolabiliter observantes, non transcurrenda.* Perry, 'Visititation of the Monastery of Thame', *EHR*, 3, 712.

[53] Talbot, *Cistercian Letters*, p. 190.

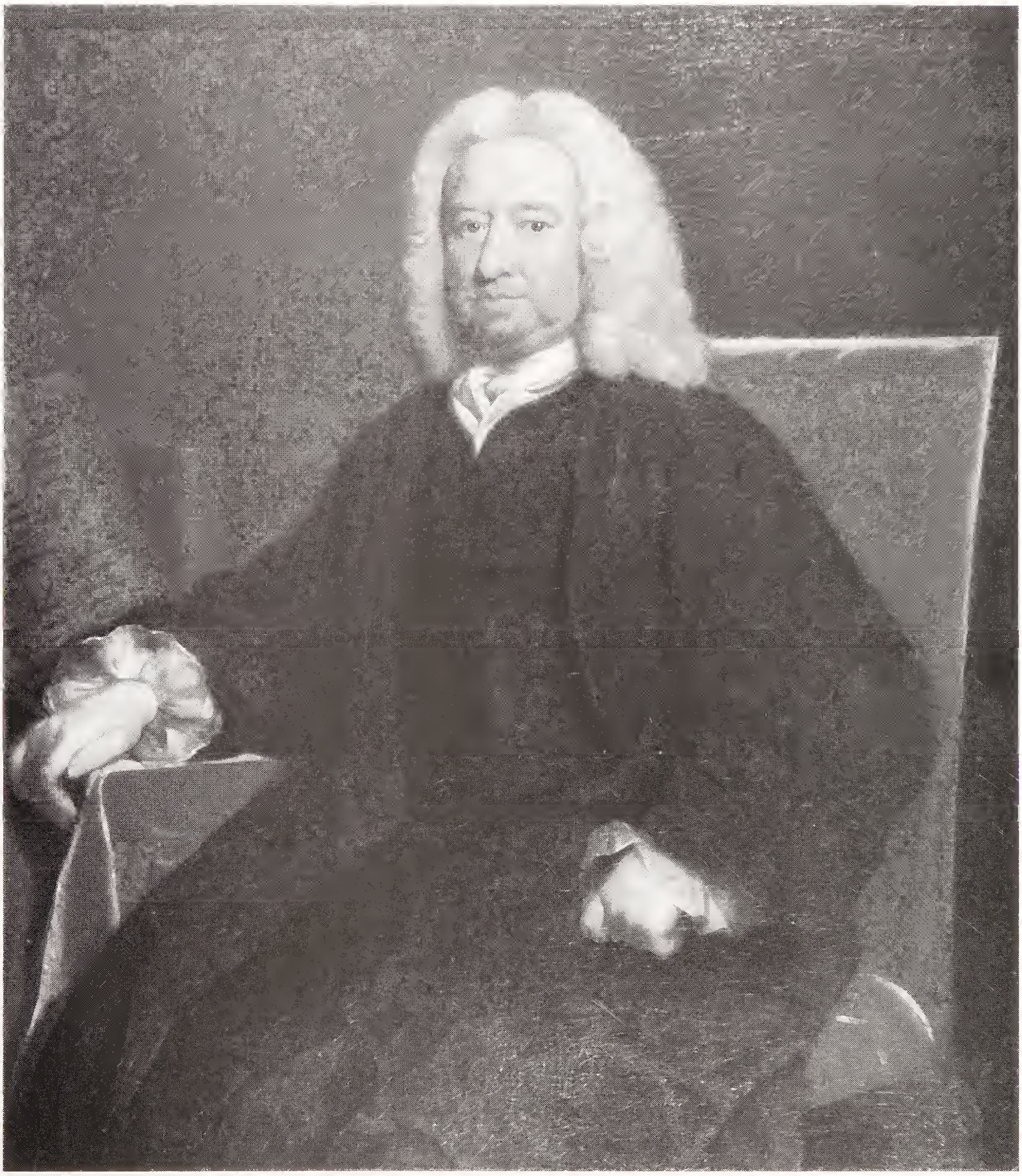

Fig. 1: An eighteenth-century English School portrait of William Wrightson which hangs in Cusworth Hall. Reproduced by permission of Doncaster Metropolitan Borough Council

This portrait shows a Pipe Roll at Wrightson's right hand and could have been painted when he became Second Secondary in 1730 or First Secondary in 1739.

WILLIAM WRIGHTSON (1676–1760), THE PIPE OFFICE OF THE EXCHEQUER, AND THE RE-BUILDING OF CUSWORTH HALL

By Brian Barber

William Wrightson (1676–1760) had landholdings in both Yorkshire and the North East, and represented Newcastle and then Northumberland in successive Parliaments. In 1724 he inherited the family estate at Cusworth near Doncaster where between 1740 and 1753 he re-built the hall. This article makes additions and amendments to his biographical entry in 'The History of Parliament' and also describes, largely from his own papers, the workings of the Pipe Office of the Exchequer where he held a sinecure that provided a substantial supplement to the income from his landed estates, providing the means by which he rebuilt his family seat. An Appendix contains brief details of the clerks and attorneys of the Pipe Office from 1732 to 1833, when the office was abolished.

THE WRIGHTSON ESTATES

William Wrightson's biography in *The History of Parliament* describes his early life as 'obscure' but, with one exception, its course appears readily comprehensible. He was born in 1676, the second son of Robert Wrightson (1626–1708) of Hemsworth, an attorney who had purchased the advowson of the parish in 1663, 'together with a good estate' and a seat at Low Hall from a long-established proprietor in the parish, possibly in 1656.[1] The manor of Hemsworth, along with the High Hall, belonged to the Wood family, ennobled as barons and later earls of Halifax, who became prominent in national politics in the nineteenth and twentieth centuries. Robert transferred the family seat to Cusworth, about ten miles to the south east, on purchasing the manor of Cusworth from the Wray family for £2,500 in February 1669/70, although the family continued to use the parish church of St Helen, Hemsworth, as its place of burial until the early nineteenth century.[2] As Robert's younger son, William Wrightson required an occupation and his father seems to have provided this by buying him articles to one of the sworn clerks in the Pipe Office of the Exchequer. We will return to his career there in the following sections.

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[1] J. Hunter, *South Yorkshire*, vol. 2 (1830), p. 428. Wrightson appears to have bought unspecified property in Hemsworth and North Elmsall on 4 Nov. 1656 (Doncaster Archives, hereafter DA, Battie-Wrightson of Cusworth, DDBW/D/h/4) and bought the advowson from a Mr Bladon on 20 Feb. 1663 (DA, DDBW/K/1). See also J. Foster, *Pedigrees of the County Families of Yorkshire, West Riding* (London, 1874), Wrightson of Cusworth.

[2] DA, DDBW/D/c/60-61, Lease and release of the manor of Cusworth, 1/2 Feb. 1669/70; *The Register of the Parish of Hemsworth Co. York 1654–1812*, ed. J. Charlesworth, Yorkshire Parish Register Society, vol. LXXIX (1926).

One obscurity in his early life is nature of the business or social contacts that led to his marriage to Isabell Matthews (1650–1716) in Newcastle upon Tyne on 2 February 1699/1700.[3] The *History of Parliament* correctly implies that Wrightson's career was advanced by this astute marriage to 'the heiress of a significant estate in Newcastle'. She was the daughter of Ann and Francis Burton, a merchant adventurer of Newcastle who had married her first husband, Thomas Matthews, a Newcastle merchant, on 21 December 1675. He had died in April 1697,[4] and his will identifies her inheritance as two houses in Durham City, subject to an annuity of £9 a year payable to his sister; undefined property (in fact, a farm on lease from the dean and chapter of Durham) in West Rainton, Co. Durham; and tithes of corn at North and South Charleton, Northumberland, also held on lease from the dean and chapter of Durham; and undefined other property in County Durham, Northumberland, Newcastle upon Tyne and Yorkshire.[5] The property in Durham city and Newcastle were producing an income for Wrightson of £227 gross in 1718; the value of the other properties is unknown.[6] Thanks to his father, Wrightson did not come to his marriage with the widow empty-handed. Apart from his prospects in the Pipe Office, their marriage settlement provided his wife with a jointure consisting of the rectory of Thorp Arch in the West Riding, and lands in South Elmsall with a yearly value of £100.[7]

From 1710 he served as one of the two Tory MPs for Newcastle upon Tyne.[8] He seems to have thrived on controversy for, after his first election, Anne Liddell informed her brother, Sir James Clavering, that Newcastle in 1711 was

> now a merry divided town. Their inferior representative [Wrightson, the junior MP] has att supper lately the great Dr. [Sacheverell] and six other persons. Their [sic] only wanted the old woman to make it fitt for a Gunpowder Plott.[9]

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[3] The *History of Parliament* mistakenly gives her maiden name as Beaumont, confusing it with that of Wrightson's mother.

[4] Tyne and Wear Archive Service, parish registers of Newcastle upon Tyne, St Nicholas; J. Brand, *History of Newcastle* (Newcastle, 1789), vol. 1, pp. 279-80.

[5] Durham University, Special Collections, DPR, 1682/B28/1 and /2 (will of Francis Burton) and 1697/M8/1 (will of Thomas Matthews).

[6] DA, DDBW/E2/2, Account book of William Wrightson, 1717-1760. Unspecified property in Newcastle yielding £43 a year in 1718 was his for his life only and 'The Craines' (quayside cranes?) for which he received £97 5s 8½d. in 1717-18 were subject to various charges; he leased them for £40 'per annum clear' in 1724. Wrightson sold the lease of the farm in West Rainton for £1,100 in 1721.

[7] DA, DDBW/C/1/1, Marriage settlement of 1 Feb. 1699/1700.

[8] E. Cruikshanks and others, *The History of Parliament, The House of Commons, 1690-1715*, volume 5, (London, 2002), pp. 926-8 and W. A. Speck, 'Northumberland Elections in the Eighteenth Century', *Northern History*, XXVIII (1992), especially pp. 165-6 and 170.

[9] *The Correspondence of Sir James Clavering*, ed. H. T. Dickinson, Surtees Society, vol. CLXVII for 1963 (Newcastle upon Tyne, 1967), 20 Feb. 1711 (n.s.), p. 111.

Whether Wrightson's Toryism actually veered into Jacobitism is not clear. A list of Jacobite sympathisers compiled about 1721 includes 'Mr Wrightson' as one of only two sympathisers in Cumberland, Westmorland and Northumberland. Among half a dozen Yorkshiremen listed were Lord Strafford, who will appear again later, and 'Captain Beaumont' of Whitley, almost certainly a kinsman of Wrightson's mother, Sarah, daughter of Sir Thomas Beaumont of Whitley Beaumont.[10] If there were a Jacobite component in his politics, it had apparently dissipated by 1745 when Wrightson subscribed £25 to the fund raised in Yorkshire for the 'Security of his Majesty's Person and Government'.[11] Perhaps partly in response to his openly confrontational stance, an exceptionally hard-fought campaign by the Whigs in the election of 1722 resulted in a poll in which more than three times as many votes were cast than in the election of seven years earlier, resulting in the return of the Whig candidate and the senior Tory.[12] Thus defeated, Wrightson moved on to represent Northumberland, although only briefly before being unseated on petition in 1723. The move into county politics was made possible by his second marriage.[13] This was to Isabella Fenwick of Bywell in 1722 and was, in financial terms, even more successful than his first. Her assets were indeed considerable, for she was one of two sisters who jointly inherited the Bywell estate. In the division of the estate, Wrightson and his wife acquired property in and around Mickley on the south side of the river Tyne in County Durham.[14]

His robust Toryism continued in evidence after his return to Yorkshire in 1724 when he inherited the family estates on the death of his married but childless elder brother, Thomas. He participated with fellow Tories in the hard-fought election of 1734 and played a boisterous role in that of 1741.[15] After the latter election, a group of eighteen Yorkshire justices and other gentry petitioned the Earl of Malton to lay their case for Wrightson's removal from the commission of the peace before Lord Chancellor Hardwicke. They claimed that he had fomented riotous behaviour against the Whig candidate by using his position as a justice of the peace to release the leader of the rioters and his supporters from custody in York Castle before the close of the poll, so allowing them to continue the assaults for which they had been imprisoned before polling began. Wrightson's answer was that he had intervened to secure the release of the man when approached by a local doctor. He had told him that the prisoner had no means to pay for his subsistence in prison and that he sought his liberation 'as an act of charity'. The Lord Chancellor, probably aware that those on the opposing side of the argument also represented the opposing side in politics, wisely decided not to intervene and to leave Wrightson on the commission.[16]

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[10] Royal Archives (by permission of H.M. Queen Elizabeth II) Stuart Papers, RA, SP/65/16, sections 39 and 43.

[11] J. Oates, 'The Responses in North Eastern England to the Jacobite Rebellions of 1715 and 1745' (Ph. D. thesis, University of Reading, 2001), p. 687. His future brother in law, John Battie, subscribed £20 (p. 673).

[12] A manuscript copy of the poll book for the election of 2 Feb. 1714/5 together with a list of electors arranged in occupational groups is to be found at DA, DDBW/P/27.

[13] His first wife had died on 13 March 1716; her oval memorial tablet is one of the few to remain in the church of St Nicholas (now the Anglican cathedral). I am grateful to Mr. Roger Fern, formerly of Newcastle University Library, for a photograph of the tablet.

[14] DA, DDBW/N/IV/90-91, Articles of agreement between William and Isabella Wrightson and John and Margaret Fenwick, 30 Oct 1723 and conveyance from Fenwick to Wrightson, 10 June 1724.

[15] J. J. Cartwright (ed.), *The Wentworth Papers 1705–1739, Selected from the Private and Family Correspondence of Thomas Wentworth, Lord Raby, created in 1711 Earl of Strafford of Stainborough Co. York* (London, 1883), p. 505 and C. Collyer, 'The Yorkshire election of 1734', *Proceedings of the Leeds Philosophical and Literary Society, Literary and Historical Section*, VII part I (July 1952), pp. 53-82.

It is possible to describe with some precision the estates that Wrightson inherited on his succession, as a series of surveys commissioned around this time by both brothers in turn survive from this period. The entire Wrightson estates comprised 2,512 acres and of this the portion brought in by his second marriage accounted for 1,098 acres, or just over two-fifths. In terms of income, the total rental in 1725 amounted to £996, in which the Durham and Northumberland estates brought into the family by William's marriages represented almost half, although this included a small proportion of income from properties in Newcastle upon Tyne which were granted for his life only. The former Fenwick estates alone contributed an income of £332.[17]

THE PIPE OFFICE

In addition to the resources of his landed estates, however, Wrightson came to command a considerable income derived from his post in the Pipe Office. This was located at Gray's Inn, where Wrightson was living at the time of his first marriage in February 1700 and where he provided himself with an expensively furnished apartment in 1709.[18] This department of the Upper Exchequer accounted for both the revenues and expenditure of the Crown. Its ancient function, and that from which it gained its name, was to compile the annual Exchequer Roll, or Great Roll of the Pipe, a series of records that survive in a continuous series from 1156 to 1833. The office enrolled the accounts of the sheriffs and, when the accounting process was satisfactorily completed, granted them their 'quietus' or discharge, which gave them legal immunity from any subsequent dispute over their accounts. Although these traditional revenues of the Crown gradually diminished in importance, the scope of the accounting responsibilities of the Pipe Office widened with the emergence of new sources of state income from other forms of taxation, including customs, excise, land tax and assessed taxes. The Office was also responsible for granting discharge to those entrusted with 'imprest' accounts, that is, monies advanced by the Exchequer to finance the expenditure of any branch of the public service. The recipients then became accountable for these advances at the Exchequer of Account and, ultimately, to the Pipe Office.[19] These accounts of expenditure were collectively known as the 'Anglia' accounts since, unlike the traditional accounts of the sheriffs, they derived from general income and expenditure and not from any specific county or locality. In total, they comprised

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[16] British Library (hereafter BL), Hardwicke Papers, Add. Mss. 35601, vol. CCLIII, ff. 3, 5-34 and DA, DDBW/P/50-53. According to his account book, 1725-58, Wrightson spent four days at York for the election and spent £62 2s 0d. including a 'sub[scription]' of £30 (DA, DDBW/A/1). C. Collyer, 'The Yorkshire election of 1741', *Proceedings of the Leeds Philosophical and Literary Society, Literary and Historical Section*, VIII part II (Oct 1953), deals with the campaign and not the events of the poll.

[17] The income from the estate has been calculated from William Wrightson's Rental, 1717-1760, (DA, DDBW/E2/2). His colliery tenants included Thomas and later John Bewick, the father of the celebrated wood engraver, Thomas Bewick (rental, ff. 85 and 87).

[18] Gray's Inn is given as his abode in the entry of his marriage at St Nicholas, Newcastle upon Tyne. He spent a total of £60 7s 0d. on furnishings, including £27 on a bedstead and bedding, £11 on a desk or 'scrutore' (escritoire), £6 on a 'tea table and appurtenances' but only £2 5s 0d. on 'My man's bed and bedding', Account Book of William Wrightson 1717–1760 (DA, DDBW/E2/2). From 1793 until its demise forty years later the department was located at Somerset House.

> not only all the Accompts of the Ancient Revenues but of all dutys rates & taxes granted by parliament and all other public accompts either of moneys paid into the Exchequer or impressed and issued from thence to be expended for any Publick Services or Occasions.[20]

In other words, they comprised the entire revenue and expenditure of government. A table of fees, itemising those due to the Clerk of the Pipe and his staff 'for engrossing the imprest and Anglia accounts and the quietus thereupon' under fifty-three distinct heads is amongst Wrightson's papers, along with a table for the fees for the great, or royal household, accounts.[21]

Government enquiries into the activities of the traditional parts of the public service had no effect on the work of the Pipe Office.[22] The cumbrously quasi-judicial and increasingly antiquated practices of the Exchequer and its remorselessly bureaucratic pavan, anciently designed to prevent peculation, are well-known to have been a source of grave embarrassment to one prominent eighteenth century politician.[23] The interminable delay in settling the public accounts of Henry Fox were far from unique, judging from some of the entries for the Easter term of 1763 in a Pipe Office fees book, which records the settlement of various accounts for the mid 1740s.[24] An enquiry into the Office, completed in 1738, apparently led only to an inconclusive tussle over 'innovated' fees.[25] The financial reforms of the 1780s left the Office unaffected, but it was included in a survey by the Commons' select committee on finance of 1798.[26] This repeated earlier recommendations to abolish certain posts, including that of Clerk of the Pipe. Nothing, however, was done until 1817, when the government, in search of post-war economies and pressed by its country gentlemen on the backbenches, decided to abolish a large number of sinecures as they fell vacant. Seven Acts made a prospective end to offices discharged through deputies in England, Scotland and Ireland, many of them in the Exchequer, including the Clerk and the Comptroller of the Pipe. Another Act allowed government to grant pensions to those retiring from the most senior posts in government and the civil service to compensate for the loss of sinecures.[27] However, from 1821–2, the reform of the procedures rather than merely the abolition of sinecure posts began. An Act of 1821 made the Exchequer Remembrancer the official responsible for enrolling the accounts of the Audit Office, in place of both the Lord Treasurer's Remembrancer and the Clerk of the Pipe, whose procedures were pointedly described in section seven as 'attended with great inconvenience and much unnecessary delay and expense, without answering any purpose of real utility'. In the following year, three further Acts superseded the ancient 'course of the Exchequer' in the accounts of penalties from quarter sessions and then for the accounts of the land and assessed taxes.[28] One internal consequence for the Pipe Office was that no further writing clerks were recruited.[29] The Pipe Office and its routines survived in its limited role, essentially restricted to the processing of the accounts of the sheriffs, but the Whig government completed the process initiated over a decade earlier and abolished the Office in 1833.[30] Overall, the reforms of the early 1830s reduced the size and cost of the Exchequer significantly: its staff of ninety had cost £73,528 in 1815, but by twenty years later, there were only fourteen of them, being paid a tenth of that sum, seemingly substantiating the Whig claim that 'retrenchment and reform' went hand-in-hand.[31] The ancient Exchequer could be said to have exacted a spectacular revenge for its humiliation, for it was the burning of some of its records, a huge accumulation of wooden counter-tallies, in the stoves of the House of Lords that caused the fire which destroyed the old Palace of Westminster in October 1835.[32]

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[19] For further details, see J. E. D. Binney, *British Public Finance and Administration, 1774-92* (Oxford, 1958), especially pp. 143-4, 172-8, 212-16, and 218-19, although the procedures by this date were different in some respects from the early eighteenth century; and for the records, see the *Guide to the Contents of the Public Record Office*, (London, 1963), vol. 1, pp. 95-6.

[20] DA, DDBW/P/25/2, Memorial to the Commissioners of Inquiry, 23 Jan. 1732/3. Copies of the submissions by the Pipe Office to the Commissioners appointed in 1732 are also to be found in the Board's End Book 1729–1727 (The National Archives [TNA], E369/67).

[21] The tables are to be found at DA, DDBW/P/24/1 and 4.

[22] G. E. Aylmer, 'From office-holding to civil service: the genesis of modern bureaucracy', *Transactions of the Royal Historical Society*, 5th series, 30 (1980), particularly pp. 99-102.

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[23] L. S. Sutherland and J. Binney, 'Henry Fox as Paymaster-General of the Forces', *English Historical Review* [*EHR*], LXX (1955). The Anglia Account Book of the Pipe Office, 1739-1775 (TNA, E 369/60), records that Fox's accounts for June 1757 to December 1758 were finally passed on 25 September 1771, and that a substantial £184 4s 0d. was exacted in fees (p. 190). Later accounts of Fox are recorded as being passed in 1772 and 1774, when they attracted fees of £91 11s 0d. and £91 19s 0d. (pp. 200 and 224).

[24] The Anglia Account Book, 1755-66 (TNA, E 369/61) records fees for accounts settled in the Easter term of 1763 that included those of 'the purveyor of the hospital in the expedition to North America' and the Governor of Cape Breton, both for 1746-7, and the Duke of Argyle for funding the Argyleshire militia in 1745.

[25] The dispute appears in Wrightson's copies of the papers relating to the commission in inquiry of 1732-8 in DA, DDBW/ 9/25/3 and 25/5, but two paragraphs to be found in a transcript in the Board's End Book, 1729-1737 (TNA, E 367) are not included in Wrightson's copy and a final paragraph in his is not to be found in the Board's End Book. A petition against the charge of innovated fees, dated 1 March 1737/8, is to be found amongst Wrightson's papers (DA, DDBW/9/25/5), but not in the Board's End Book.

[26] *Twenty-Seventh Report from the Select Committee on Finance, etc, Courts of Justice.* (1798), *Reports of the Committees of the House of Commons 1751-1801* (1803), vol. XIII, pp. 8-15 and 199-343.

[27] The Acts are 57 Geo. III, c. 60–7. See also W. R. Brock, *Lord Liverpool and Liberal Toryism 1820-1827*, 2nd ed. (London, 1967), pp. 89-97, and N. Gash, *Lord Liverpool* (London, 1984), pp. 131-2.

From the early eighteenth century, the principal offices in the Exchequer, granted by royal letters patent, were coming to be routinely granted for life. The attempts that had been made since the Restoration to substitute terminable appointments in place of the life tenures that had become customary since the fifteenth century were abandoned and these posts were increasingly used to provide lifelong incomes for the dependants of politicians. The terms of the patents allowed offices to be delegated to a competent deputy, which allowed a simple sinecure to be made out of an arrangement originally intended to ensure financial security for those unable to carry out their duties through age or infirmity.[33] In contrast, other departments of government in Augustan England, especially those engaged in revenue-collection, were emerging in a form that has been characterised as a 'new bureaucracy', prefiguring the civil service created over a century later. In these, appointments were made during pleasure, but with security against dismissal on political or personal grounds. Realistic salaries were awarded and the taking of fees or other supplements to income forbidden.[34] The routines and rewards of the Pipe Office represented what has been described as the 'old administrative system', characterised by the purchase of office, life tenure, payment by fees, and by sinecurism, rather than the new model that was emerging gradually and unevenly.[35]

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[28] 'An Act to alter and abolish certain forms of proceedings in the Exchequer and Audit Office', (1 and 2 Geo. iv, c. 121); 'An Act for the more speedy return and levying of fines' (3 Geo. iv, c. 46); and 'An Act to amend the laws relating to the Land and Assessed Taxes' (3 Geo. iv, c. 88). The first and third of these Acts contain provision for compensation for loss of fees in the office of the Clerk of the Pipe.

[29] See the Appendix no. 55, which shows than the last clerk entered the office in April 1821.

[30] 'An Act for facilitating the appointment of sheriffs, and the more effectual audit and passing of their accounts; and for the more speedy recovery of fines, issues, forfeited recognisances, penalties, and deodands; and to abolish certain offices in the Court of Exchequer' (3 and 4 Wm. iv, c. 99).

[31] J.R. McCulloch, *A Statistical Account of the British Empire*, 2 vols (London, 1847), vol. ii, p. 529, reproducing a table from a 'Return of Establishments of the Public Departments and Offices in Great Britain and Ireland in 1815 and 1835'(Parliamentary Paper 609 of 1836). The total reduction in salaries was from £3.76m to £2.79m.

[32] H. Jenkinson, *A Manual of Archive Administration*, 2nd ed. (London, 1937), p. 229 and R. Cooke, *The Palace of Westminster* (London, 1987), p. 69, with plans showing the buildings occupied by the Exchequer on page 58 and the extent of the fire of October 16 1834 on page 68. The images of destruction on pages 77-9 regrettably do not include Turner's fine impressionistic late painting, now in Philadelphia.

[33] J. C. Sainty, 'The Tenure of Offices in the Exchequer', *EHR*, lviii (1965), explains the origins of the changes in tenures from the thirteenth to the nineteenth century, caused initially by a change from clerical staff, who expected to be promoted out of royal service into the Church, to laymen, for whom bureaucracy was a career.

In contrast to the patentees, which in the Pipe Office included the Clerk and the Comptroller of the Pipe, the careers of those who served under them are largely unexplored, dependent as such investigations generally are upon informal and unofficial sources, of which very few seemingly survive. Writing of Augustan civil servants at this subordinate level, Professor Holmes remarked that 'fleeting, isolated, glimpses are the most we can hope for, without laborious and protracted biographical investigation.'[36] It is therefore fortunate that a small quantity of papers accumulated by Wrightson from his years in office remain amongst the family archive and provide an insight into the internal workings of one of the ancient offices of government in this period.[37]

THE WORKING OF THE EIGHTEENTH-CENTURY PIPE OFFICE

Wrightson appears to have entered the Pipe Office in about 1694, when he would have been about eighteen, for in February 1737/8 he wrote to his deputy that 'I have known the Office for 44 year'.[38] He entered in the customary manner by being articled as a writing clerk to one of the attorneys there on the payment of a premium by his father. It is possible that his father gained this opportunity for his younger son through his professional contacts. Amongst his father's papers are five letters on legal business from another attorney and fellow Yorkshireman, Joseph Hornby of Furnival's Inn, whose son, Charles, had entered the Office around 1691.[39] Its personnel consisted of the Clerk of the Pipe and the Comptroller of the Pipe, both appointed by royal letters patent. Below them were eight attorneys, or sworn clerks, the two most senior of whom were known as First and Second Secondary.[40] They were attorneys only in the sense that they were acting on behalf of the Clerk of the Pipe, and were not legally qualified, for 'the office is entirely an office of account and revenue and has no Concern in any proceedings either of Law or Equity or in the Litigation of any matters'.[41] Below them were the two senior writing clerks, known as the Board's End Clerks whose duties included copying into the Board's End Books all the documents addressed to the office authorising or excusing payments from and to the Exchequer.[42] There was also a number of other writing clerks apprenticed to the attorneys and a bagbearer or messenger. The number of writing clerks could exceed the number of attorneys, as it did in 1756, because some of the clerks outlived their masters. The writing clerks other than those 'at the Board's End' were not formally part of the establishment of the office, although it relied upon them to provide a stream of trained recruits. Office hours, as reported at the end of the century, were 10 a.m. until 3 p.m. and 5 p.m. until 7 p.m., or 8 p.m. during the law terms. The only public holidays kept were Good Friday and Christmas Day.[43]

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[34] G. Holmes, *Augustan England: Professions, State and Society, 1680-1730* (London, 1982), chapter 8, especially pp. 257-8.

[35] G.E. Aylmer, 'From office-holding to civil service', p. 92.

[36] G. Holmes, *Augustan England*, p. 250. A list of patent-holders can be found in *Officers of the Exchequer*, compiled by J. C. Sainty, List and Index Society, Special Series, 18, (1983).

[37] DA, DDBW/P/9-25, Battie-Wrightson of Cusworth, Public and Official Papers.

[38] DA, DDBW/P/12, Draft letter of Wrightson to William Whitehead, 27 Feb. 1737/8.

The six attorneys and the two secondaries appear to have had complete discretion over whom they accepted for apprenticeship as their writing clerks. In mid century, the customary premium was £60 to £100, although Wrightson secured £126 when he took on a new clerk to replace his nephew in 1741.[44] Wrightson, by then First Secondary, was to 'direct and instruct' his apprentice in the 'business and duty of a clerk' for six years, and pay him a guinea a year, with the promise of clerk's fees thereafter for four of the counties for which Wrightson was responsible.[45] Such a system of recruitment readily encouraged nepotism. In

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[39] DA, DDBW/F7/4, Battie-Wrightson of Cusworth, Correspondence. A memorial to the commissioners inquiring into the offices and fees in the Exchequer of 1 Mar 1737/8 referred to 'Charles Hornby being much the oldest man in the said [Pipe] office at his first admission into the same upwards of 47 years past.' (DA, DDBW/P/25/5). He was the most junior attorney by Michaelmas term 1698 (Shakespeare Library and Archive Centre, Archer of Tanworth, DR37/2/box 100). Charles referred to Joseph as his father in his will (TNA, PROB 11/698).

[40] The text of the oath taken by the sworn clerks is to be found in the Board's End Books 1773-84 and 1824-7 (TNA, E 369/72 and 79).

[41] DA, DDBW/P25, Memorial of the Pipe Office to a commission of inquiry, 23 Jan. 1732, and also in the Board's End Book, 1713-1729 (TNA, E 369/66).

[42] The Board's End Books, 1681 to 1833, are held at TNA, E 369/64-81.

[43] *Twenty-Seventh Report from the Select Committee on Finance, etc, Courts of Justice*. (1798), p. 214.

[44] Fees for articles are known in four cases: see nos. 7, 15, 18 and 19 in the Appendix.

[45] DA, DDBW/P/23/3, Articles of Agreement, 27 July 1741. The clerk was to receive the income from the fees for Cambridge, Huntingdon, Northampton and Sussex, which would give him an income of £13 10s 0d. a year.

1756, four of the eight attorneys were related to one another: William Wrightson and his nephew William Whitehead, and Joseph and Charles Hornby, who were father and son. Three attorneys employed clerks who were related to them as son, brother or cousin. William Whitehead, Wrightson's deputy, wrote to him wryly on the conduct of two fellow attorneys in 1741, speculating whether the Deputy Clerk of the Pipe would object to 'Mr Cranmer's bringing in so young a Child as he has done. Mr Hornby came but to Town today and has introduced his Son as a Clerk to him in his Office, which is now well stocked with Lilliputians'.[46]

Whitehead himself had entered the office through the influence of his uncle William Wrightson, who engaged him first as his clerk and subsequently as his deputy, and Whitehead, in turn, came to employ Charles Bromley, the son of his domestic partner, as his clerk.[47] Robert Cranmer had first employed his nephew and then, when the latter died in 1746, had taken on his own cousin, James. James Humphreys had brought in his brother Walter in 1747.[48] Four members of three generations of the Hornby family worked in the Pipe Office for over a century up to 1793 and likewise Allatson Burgh and his three sons occupied places there from 1756 until the office ceased to exist seventy-seven years later.[49] Of the fifty-five staff listed in the Appendix, at least twenty-two, well over a third, are known to have been related.[50] In some cases, personal contacts rather than kinship connections may have been influential. Allatson Burgh must have provided the link that brought two young men from West Drayton into the Office, for he served the manor there as steward for his nephew, Fysh de Burgh.[51] Through his elder brother, the Revd Cornelius Burgh, rector of Foxholes, he probably gave Joseph Sykes, lord of the manor, the idea of finding his son Nicholas a berth there.[52] A similar link between the Cranmer family and Quendon (Essex) influenced the initial choice of career for Robert Howard. Attorney Charles Lowe Whyttell and the Revd James Farrar, father of James, lived in neighbouring parishes. Likewise, the Preston and Webster families of Stockton-on-Tees can be assumed to have known each other.[53]

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[46] William Whitehead to William Wrightson, 3 Feb. 1740/1, DA, DDBW/P/13. The clerks referred to are probably nos. 14 and 16 in the Appendix.

[47] The relationship is inferred from Whitehead's will of 1750-1752, (DA, DDBW/P/23/6). Whitehead had died by 6 May 1756, when Joseph Hornby was acting as Wrightson's deputy (DA, DBW/P/19) and see also the Anglia Account Book, 1755-1766 (TNA, 369/61). This volume, which began as an account book kept by Whitehead for Wrightson, remained in the Pipe Office, because after Whitehead's death it continued in use by his successor, Joseph Hornby, as Wrightson's deputy and after Wrightson's death by Hornby as deputy to Robert Cranmer.

[48] DA, DDBW/P/23/7, List of Attorneys and Writing Clerks in the Pipe Office, 1756. See Appendix, nos. 3, 12, 13, 21 and 24.

[49] See Appendix, nos. 1, 5, 14, 26, 30, 41, 42 and 44.

[50] These are Appendix, nos. 1, 5, 14 and 30; 2, 7 and 23; 3, 12 and 21 and (possibly) 16; 13 and 24; 26, 41, 42 and 44; 32 and 47; 34 and 36; 46 and 53; 25 and 37 were possibly related.

[51] See Appendix, nos. 52 and 54; *VCH Middlesex*, vol. III, ed. S. Reynolds (Oxford, 1962), pp. 192-3 and *VCH Middlesex*, ed. R.B. Pugh (Oxford, 1971), p. 71 and the de Burgh papers at London Metropolitan Archives, ACC 1216 and ACC 1386.

[52] Rev. Cornelius Burgh was rector of Foxholes from 1778–1783, before being succeeded by Rev. Richard Sykes (University of Hull, DDK/E/5 item 22, Kirk Ella Estate Papers).

It has been suggested that the recruitment field of government service in this period came from minor or necessitous gentry stock or their younger sons.[54] This was so in the case of Wrightson, a second son who acquired a landed estate only through the death of his childless elder brother. Four other recruits had parents identifiable as landowners. One, the Cranmers, were lords of the manor of Mitcham and, from 1741, Quendon Hall in Essex. The other three all held land in Yorkshire: the Whytells, who had owned Gilmonby Hall in the North Riding since 1626; Allatson Burgh's father had acquired landed property near Scarborough through marriage; and Charles Heblethwayte's father had acquired the rectory estate at Bridlington. More of the recruits seem to have come from the professional and commercial classes rather than landed gentry and, not surprisingly, include a number with fathers employed in various branches of the law. Two of the three recruits to clerkships in 1756, Crofts and Heaton, were respectively a younger son and a nephew of members of Lincoln's Inn and at least nine others had fathers in the law, as attorneys, cursitors or town clerks.[55] It would, of course, be simplistic to imply some firm distinction between those with origins in land, commerce or the professions. Thus, although Joseph Sykes, the father of Nicholas, was a leading citizen of Hull, he was also a younger son of the gentry family of Sykes of Sledmere, who themselves had originated from Leeds cloth merchants' stock. He himself retired from business to the country, buying the manors of Kirk Ella and Foxholes.[56] Likewise, Robert and James Cranmer may have been members of a landed family, but their fortunes were founded by a City merchant who had purchased the manor of Mitcham in 1652.[57]

For reasons that are not apparent, there was a pronounced northern bias in the origins of many of the officers. Of the fifty-five staff known to have served in the office from 1732 to 1833, fifteen, more than a quarter, were recruited from County Durham, Yorkshire and Westmorland, although no more from the north of England entered it after 1775.[58] Apart from the statement of the father's name and his abode on the enrolment of new clerks in the board's end books from 1756, topographical ties can be identified from other sources. Charles Hornby senior was resident in Essex at the time of his death in 1739, but bequeathed property in Leeds and Hampsthwaite (both in the West Riding). John Brougham, (died 1741) requested burial in Holborn or at Skelton (Cumberland); Christopher Denton, the deputy clerk of the pipe until his death in 1759, was buried in Hertfordshire but he owned property in County Durham and the East Riding of Yorkshire.[59]

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[53] See Appendix, nos. 3 and 40; 11 and 19; 26, 37, 52 and 54; 34, 36 and 38.

[54] G. Holmes, *Augustan England*, pp. 250-1.

[55] See Appendix, nos. 1, 2, 11, 26, 27, 29, 31, 32, 34, 36 and 39.

[56] DDK/E/516, Kirk Ella Estate Papers, item 516.

[57] See Appendix, nos. 3, 12 and 16, (Essex Record Office, D/DYv, Cranmer-Byng Family of Quendon Hall) and *Burke's Landed Gentry*, (15th ed., 1937), 'Cranmer-Byng, formerly of Quendon Hall'. The editions of 1952 and later do not mention the family's former ownership of Quendon.

[58] See Appendix, nos. 2, 7, 10, 11, 15, 19, 20, 26, 32, 34-38 and, possibly, 25.

After the seven years of articles were completed, advancement was subject to the uncertainties of longevity, since office could be held for life and all the clerks 'rise gradually upon successive deaths from the board's end to the office of Secondary'.[60] Promotion for both writing clerks and attorneys was strictly by seniority of service, although a fee of two hundred guineas was exacted by the deputy clerk of the pipe before a writing clerk could become the junior board's end clerk. The periods of service endured by the clerks could be long indeed. Of those articled between 1756 and 1785, the ten who stayed the course served between twelve and thirty-two years before appointment as junior board's end clerk, with a median of twenty-three years.[61] Some, probably disheartened by the wearisome longevity of their seniors, abandoned their posts: eight of the twelve articled between 1766 and 1787 proceeded no further than their apprenticeship.[62] For those who remained, there then followed further years at the board's end before an attorney's post fell vacant, adding between two and ten years to their clerkships; Joseph Hornby died after thirteen years labouring there. As the tenure of office need be terminated only by death, some tenures were lengthy indeed. Wrightson was articled in about 1692 and relinquished his office only on his death in 1760. But his achievement was exceeded by James Farrar, who served for a remarkable eighty-one years from 1745 to 1826. In 1806, Allatson Burgh had confidently wagered his own life expectancy against that of Farrar, ten years his senior, by improperly retaining fees from excise accounts that would become his if he succeeded him as First Secondary. Unfortunately for his heirs, his death in 1815 led to a claim of almost £900 against his estate and bankrupted it.[63] Six of their colleagues between 1743 and 1831 occupied their posts for periods ranging from fifty-eight to sixty-four years.[64] In 1738, the staff of the office dolefully described their predicament, complaining of 'every attorneys seat spending a mans whole time yet none of them capable of Improvement by any Industry or otherwise than by the Change of Death' and nothing altered in the office routine over the subsequent century.[65]

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[59] TNA, PROB 11/ 698 (Hornby); 11/707 (Brougham); and 11/844 (Denton).

[60] Statement of the duties of the staff of the Pipe Office submitted to the commission of inquiry of 1732, (DA, DDBW/P/25/3) and to be found also in the Board's End Book 1729-1737 (TNA, E 369/67).

[61] See Appendix, nos. 26-32, 35, 36 and 42.

[62] See Appendix, nos. 33, 34, 37-41 and 43.

[63] Letters of Robert Bicknell to J. P. Cranmer, 1814-17 (Essex Record Office, D/DYv 548, Cranmer-Byng of Quendon).

[64] See nos. 17, 26, 29, 31, 32 and 36 in the Appendix.

THE FRUITS OF OFFICE

All the attorneys received salaries, but these were very small. In the 1730s, the First and Second Secondary respectively received gross annual salaries of £40 and £18 6s 8d. while the six other attorneys received payments ranging from £5 6s 8d down to £2 5s 10d. The net salaries were considerably less. After paying the tax levied on salaries paid by the Crown and the fees charged by fellow officers on their payment, the gross value was reduced by an eighth; office expenses, 'in coals candles paper parchment and other incidents', reduced the value of these vestigial salaries still further.[66] However, by far the greater part of the attorneys' income was derived from fees collected from those who submitted public accounts for their discharge. For all except the First Secondary, these fees came solely from the sheriffs. The size of the fee due from each naturally varied with the size and traditional yield of the county or locality. So at the head of the list in 1741 stood the county of York, whose sheriff paid £40 6s 8d. in fees each year, followed next, a long way behind, by Essex, at £21 6s 8d., with County Durham ending the list at £3. Similarly, the city of York, worth £5 in fees, headed the fifteen boroughs, cities and towns that accounted in their own right at the Exchequer, with Lichfield escaping with a mere £1 6s 8d.[67] The fees due to the writing clerks were in proportion. The number and value of the localities assigned to each attorney by the deputy Clerk of the Pipe was carefully arranged to reflect seniority and each time an attorney died there was a general reallocation of assignments to reflect seniority. It is possible to ascertain the rewards of office for the clerks and attorneys for a number of years in the mid-eighteenth century (see Table 1).

The incomes of clerks and junior attorneys were low, justifying the claim that the office made to the commissioners of inquiry in the 1730s, that 'the profits of the younger attorneys are so small as not to afford a competency without hard labour for the small reward of clerks fees'.[68] But the incomes of the more senior members of the office were comparable to the sums typically paid to salaried staff of government service in this period, when the great majority earned between £40 and £80 a year and fewer than a tenth earned a three-figure income.[69] A similar situation

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[65] DA, DDBW/25/5, Memorial to the Commission of Inquiry into the officers of the Court of the Exchequer, 1 Mar. 1737/8.

[66] DDBW/P/25/3, Statement of the duties of the staff of the Pipe Office, undated. A tax of 6d. in the pound on salaries was introduced by an Act of 7 Geo. I, c. 27.

[67] DA, DDBW/22/7, List of Assignments in the Pipe Office, undated, but 1741.

[68] DA, DDBW/P/25/3, Statement of the duties of the staff of the Pipe Office; for a statement of the income of the attorneys in 1797, see *Twenty-Seventh Report from the Select Committee (of the House of Commons) on Finance, etc, Courts of Justice*, p. 311.

[69] G. Holmes, *Augustan England*, p. 256.

Table 1: Fees of Attorneys and their Clerks in the Pipe Office, 1722-1741
(sums rounded to the nearest £)

Surname	June 1722 x Oct 1724	Apr 1729 x Apr 1730	June 1730 x Oct 1739	1741
Milbourne	**111**			
Clerk	*33*			
Wroth	**155**	**155**		
Clerk	*37*	*37*		
Hornby	**120**	**112**	**112**	
Clerk	*32*	*33*	*33*	
Wrightson	**105**	**115**	**144**	**110**
Clerk	*30*	*36*	*43*	*43*
Bradshaw	**87**	**104**	**132**	
Clerk	*27*	*32*	*33*	
Tullie	**70**	**86**	**106**	
Clerk	*23*	*29*	*35*	
Cranmer	**53**	**70**	**89**	**104**
Clerk	*13*	*17*	*23*	*41*
Sheldon	**19**	**50**	**73**	
Clerk	*6*	*12*	*17*	
Hornby jr.		**19**	**46**	**92**
Clerk		*6*	*14*	*33*
Maidstone			**19**	**80**
Clerk			*6*	*27*
Whitehead				**33**
Clerk				*17*
Denton				**42**
Clerk				*19*
Winter				**48**
Clerk				*20*
Brougham				**10**
Clerk				*7*

Source: Lists of Assignments in the Pipe Office (DA, DDBW/P/22).
'x' indicates an unknown date between the dates given.
The officers are arranged by seniority from First Secondary to eighth attorney. The fees due to their Clerks appear in italics on the line below.
The three undated statements of fees before that of 1741 have been given limiting dates based on the certificates of reassignment in Doncaster Archives, DDBW/P/9 and the dates of death of various attorneys.
Note that the Anglia fees due to the First Secondary are not included here.

prevailed amongst the cursitors of the court of Chancery, who were responsible for the formulation of writs. Their net incomes varied greatly and, in 1797, whilst the cursitor who processed writs for Oxfordshire and Rutland received £21 8s 10d. a year, the three who were responsible for London and Middlesex each earned over £600, while the earnings of their deputies ranged from £7 to £142.[70]

It was a specific group of fees that the office levied, namely those on the sheriffs' accounts, which attracted the attention of Parliament. These became a political issue because all the members of the House of Commons would have had experience, in person or by report, of the office of sheriff. All of them would have known someone who was serving as a sheriff, or had themselves served as sheriff, or could expect appointment at some time of their lives to the dubious honour of this expensive annual office. At the end of the seventeenth and into the early eighteenth century, a 'Sheriffs' Bill' was regularly, although inconclusively, brought before the Commons to regulate the fees to which they were liable on the submission of their accounts. Between 1712 and 1713, the contentious provisions of two such Bills brought Wrightson into contact with the Yorkshire Tory peer, the Earl of Strafford. Wrightson had the interests of the Office and his own income to consider and Strafford had a highly-profitable grant of the fees from post fines to protect.[71] Wrightson hoped to prejudice Strafford against the Bill by claiming that if it should pass, 'whereas before you received the post fines in ready money, you will be sent to the Treasury to sollicite [sic] and always at the mercy of the treasury'. The threat seemed imminent for, as Richard Wentworth reported to Lord Strafford, his brother, 'I am sure these twenty years this Bill was never so near passing, for the Ministry have treated this Bill with a great deal of tenderness as a favourite of the house of commons and from them there has been great solicitations'. A group of four, including Wrightson himself, advised Strafford over parliamentary tactics on the Bill, debating whether a clause to protect his grant would be adequate. The advisors concluded ''twou'd be better for your grant if the Bill did pass with this saving clause for then 'twou'd have the sanction of an Act of Parliament'. Wentworth remarked that 'Wrightson was very melancholy' at their decision, disappointed that obstruction from Strafford could not now be relied upon to oppose the Bill. It was referred to a select committee but soon followed its predecessors into oblivion.

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[70] H. C Maxwell-Lyte, *Historical Notes on the Use of the Great Seal of England*, (London, 1926) pp. 14-16. Twenty-one of the 24 cursitors were absentees. Like the Pipe Office, the cursitors were also abolished by the Whigs, and ceased to act after 1835.

[71] Post fines were the fees due to the Crown on the completion of a 'final concord' (a fictitious form of conveyancing) in the Court of Common Pleas. The correspondence between Richard Wentworth and his brother the Earl of Strafford on this subject can be found in the BL, Stafford Papers, Add. Mss. 31144, volume ii, ff. 242-4, 247-8, 249-50, 253-4, 379 and 289-91, from where the quotations here are taken. The income from the farm of post fines is given in 'An account of annual payments out of the Pipe Office' (undated, but 1705) Parliamentary Archives (HL/PO/JO/14/13/3825) and the Board's End Book 1681-1772 (TNA E 386/65).

In the next parliamentary session the Pipe Office responded to the threat of legislation by fielding its own proposals and Wrightson wrote to Strafford assuring him that these would 'prove to your Lordship's benefit and advantage'. Wentworth reported to his brother that there was a Bill 'brought in by the officers of the pipe office, whose business 'tis not to have any such Bill pass, or else as I believe as you do Mr Wrightson wou'd be ready enough to prejudice your Grant since he's put out'.[72] Wentworth assured his brother that Lord Clarendon had promised to read the Bill and that if there was anything prejudicial to the grant 'notwithstanding what Mr Wrightson tells him' he would oppose it. The remark that Wrightson was 'put out' in 1713 appears to have been the basis of the claim in the *History of Parliament* that he lost his place in the Pipe Office in that year. Yet it seems clear from the context that there is a more plausible interpretation. It seems more likely that he was merely put out of countenance – disconcerted – by again being unable to manipulate Strafford and his allies to support the interests of the Pipe Office. However, the new Bill also failed, and it was not until 1716 that the persistence of the Commons was rewarded. The Act obtained in that year contained an initial clause imposing severe financial penalties for exacting unauthorised fees from sheriffs and an eight-page schedule detailing the fees to be levied by the officers of the Pipe Office.[73]

Certainly, there is no suggestion in Wrightson's own papers that there was any hiatus in his Pipe Office service. He had probably become the eighth, most junior, attorney after the death of Thomas Cole, Second Secondary, in July 1701 (a few months after his first marriage), when he took over the examination of the sheriff's accounts for the counties of Cambridge and Huntingdon and for the county of the city of Coventry.[74] As further of his seniors amongst the attorneys died, the Deputy Clerk of the Pipe reassigned their responsibilities and the associated fees between him and his colleagues. He received Northampton two years later and Derbyshire in 1709. Then in the 1720s followed Sussex, Berkshire together with the City and County of York and Devon (in 1722, 1724 and 1729 respectively) and finally Kent in 1730. By this time he had become Second Secondary and in 1739 he gained the position of First Secondary. The chronology of Wrightson's own career demonstrates how the lottery of mortality determined the varying pace of advancement in the Pipe Office. Whilst he had occupied the post of Second Secondary for only nine years before obtaining the highest position his own longevity postponed the

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[72] BL, Strafford Papers, Add. Mss. 31144, vol. ii, 9 June 1713, f.379.

[73] 'An Act for the better regulating the Office of Sheriffs, and for ascertaining their Fees, and the Fees for suing out their Patents, and passing their Accounts' (3 Geo. I, c. 15).

[74] Shakespeare Centre Library and Archive, DR37/2/Box 100, Archer of Tanworth; DA, DDBW/P/9, Roll of certificates of assignment, 1707-1739.

[75] Robert Cranmer held the post for some fifteen years until his death in May 1776. (TNA, E 369/72). He had been fifth attorney in the early 1720s, so must have been in his mid-seventies at the time of his death. See Appendix, no. 3.

Table 2: William Wrightson's Income from the Pipe Office Fees, 1729–30 to 1759–60
Sums rounded to nearest £.

Year	Income from Pipe Account Fees	Income from Anglia Account Fees	Total of Fees from Pipe and Anglia Accounts
1729-30	151		
1730-1	209		
1731-2	250		
1732-3	250		
1733-4	342		
1734-5	172		
1735-6	not available		
1736-7	[230]		
1737-8	[302]		
1738-9	[336]		
1739-40	203	322	526
1740-1	166	565	731
1741-2	288	710	998
1742-3	264	539	802
1743-4	228	708	936
1744-5	206	706	911
1745-6	221	344	565
1746-7	197	447	644
1747-8	216	537	753
1748-9	227	409	636
1749-50	221	641	862
1750-1	222	591	813
1751-2	203	901	1,105
1752-3	209	502	711
1753-4	32	569	601
1754-5	235	496	731
1755-6			948
1756-7			1,022
1757-8			805
1758-9			976
1759-60			743

Sources: Doncaster Archives, DBW/P/22/2-3 and P/12 and P/20

Note: Wrightson's Pipe Office fees for 1736-9 are not available in Wrightson's own totals and have been calculated from the sums found in his papers. They may not be wholly comparable, and so are enclosed in square brackets. Complete figures for 1735-6 are not available from any source.

final promotion of Robert Cranmer, his Second Secondary, for twenty-one.[75] By October 1739, Wrightson was at the apex of his earning potential. In his new post he became responsible for the 'Anglia' accounts mentioned earlier. On becoming an attorney, his income would have been £20 10s 0d. from the counties assigned to him. It is not then possible to establish Wrightson's income from the Pipe Office before 1722, when he was receiving £105 3s 4d. annually in fees but from 1729–30 there survives his own record of the income he received in almost every year up to his death. The significance of the Anglia account can be seen in Table 2, where this component of his income can be separately identified from 1739–40 to 1754–55.

The Anglia account routinely comprised two thirds to three quarters of the total, broadly moving in line with the fluctuating size of the government's budget, the largest variables of which were military and naval expenditure. Unlike his colleagues in the Pipe Office, the First Secondary, because of the receipt of the Anglia fees, was exceptionally well rewarded. When William Roth died in 1730, the post was said to be worth £500 a year and the obituary of Charles Hornby, who occupied it from 1730 to 1739, reported that he occupied 'a place of 800l. Per An.'.[76] In the later 1720s, only eighty-four of the entire salaried government staff were receiving £500 a year or more. Wrightson was receiving a fee income greater than the salary of an under-secretary.[77] The effect of his Pipe Office fees was to supplement the income he received from his landed estate very substantially. According to his own calculations, from 1739–40 to 1759 he received a total of £16,772 0s 9½d. from government office, an average of £798 a year, approximately equalling the annual income of £808 from all his estates in 1741 and £834 in 1759.[78] (The estate income was less in 1741 than the £996 in 1725, referred to earlier, because properties in Thorp Arch, Newcastle upon Tyne and County Durham were sold between 1729 and 1737.) His successor, Robert Cranmer, received an income from Anglia fees alone that averaged £1,070 between 1761 and 1765, after earning only £216. 17s 2d. in fees as Second Secondary in the previous year.[79]

Wrightson himself may have given little time to the business of the Office when acting as MP from 1710 to 1724 and less from that date onwards, after he inherited the family estates. Certainly, from at least 1730 when he was Second Secondary, his office affairs, management of his office finances and the making of a wide variety of metropolitan purchases were delegated to his nephew, William Whitehead, and he was occupying his office as a sinecure.[80] His term as First Secondary ended only with his death in 1760 in his eighty-fourth year, after a career in the Pipe Office spanning more than six decades.

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[76] *Grub Street Journal*, 22 (4 June, 1730), p. 94 for the obituary of 'Captain Wroth' and *Gentleman's Magazine*, 9 (1739), p. 496 for Hornby's obituary notice.

[77] G. Holmes, *Augustan England*, pp. 257 and 259.

[78] Calculated from the Rental of William Wrightson, 1717-1760 (DA, DDBW/E2/2).

[79] Anglia Account Book, 1755-66, (TNA, E 369/61).

[80] Whitehead's itemised accounts of his purchases for his uncle, aunt and niece and some of his receipts for purchases from 1729 to 1752 can be found at DA, DDBW/P/11-21. There are summary accounts in the Anglia Account Book, 1755–66 (TNA, E 369/61).

THE RE-BUILDING OF CUSWORTH HALL

Like some of his contemporaries in government service, Wrightson left a permanent memorial to his prosperity, transforming his profits of office into magnesian limestone in the shape of a new house.[81] The seat that William Wrightson had inherited from his elder brother was drawn by Samuel Buck in his Yorkshire sketchbook of about 1720.[82] Piecemeal alterations and additions were made in the decade following his inheritance, but in the late 1730s he began to plan major improvements. It seems that his first intention was merely to enlarge the existing house. He chose George Platt of Rotherham as his builder, and was to continue to retain him as his plans grew more grandiose.[83] This initial plan was estimated to cost £733 12s 6d, assuming that Wrightson provided all the building materials apart from bricks and glass and organised their transportation to the site. Two other estimates for 'A large 5 Window House' show Wrightson's changing intentions. Both proposals entailed not the modification of the old Hall, but the construction of an entirely new building, a four-storey house, one in brick, the other faced with ashlar on the two fronts and paving of the best quality from the Penistone quarries. Both were to have wainscoting in the principal rooms, although in some it was to be 'old wainscot', presumably removed from the existing house. One, with two chimneypieces in marble and eight of stone, was to cost £1,035. The other, at a more ambitious cost of £1,485, was to have fifteen chimneypieces of freestone, six of bluestone and three of marble, London glass in the principal fronts, Bolsterstone glass in the others and strong lead glass in the cellar windows. In both cases, the supply and transport of building materials was again the responsibility of the client. The new house was to be built on a new site located at a short distance from the existing hall and on a higher elevation 'from which there is an extensive prospect over the whole of the level country around Doncaster'.[84]

Whilst it is not possible to date these estimates, Wrightson's 'New House Account' shows that work in raising stone on the estate from Brandfield near to the site of the new house began in 1735. Further stone was obtained in 1737 both from the same source and from Brodsworth, where the estate was owned by Wrightson's

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[81] G. Holmes, *Augustan England*, p. 259.

[82] 'The South East Prospect of Cusworth the Seat of Tho. Wrightson' in *Samuel Buck's Yorkshire Sketchbook. Reproduced from Lansdowne MS.914 in the British Library with an introduction by Ivan Hall*, Wakefield Historical Publications (Wakefield, 1979), p. 67.

[83] For the Platt family, see H. Colvin, *A Biographical Dictionary of British Architects, 1600–1840*, 4th edition (London, 2008), pp. 808-9. The plans, estimates and accounts for Platt's house are to be found at DA, DDBW/H/1-59 and 126-128.

[84] J. Hunter, *South Yorkshire*, vol. 1, (1828) p. 350.

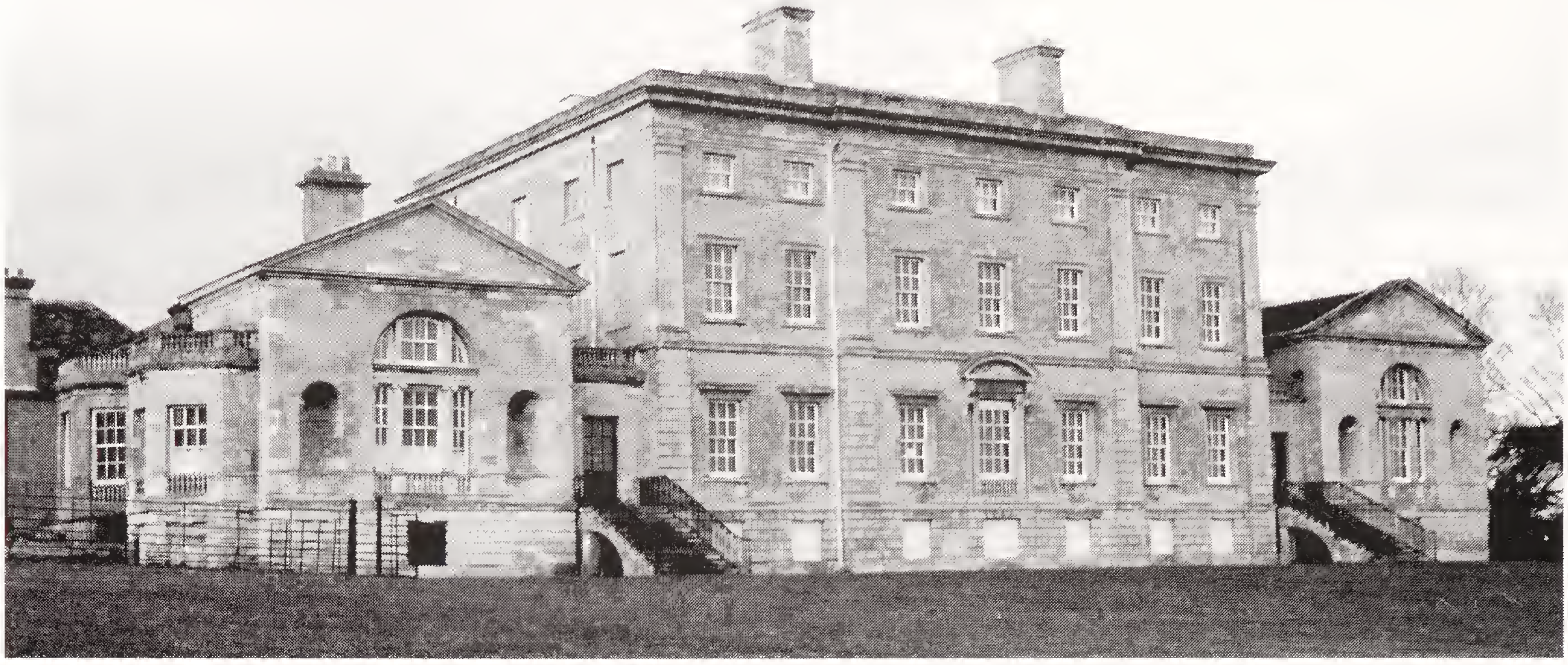

Fig. 2: Cusworth Hall, south front, showing the chapel (west) wing and the library (east) wing. (photograph, Edward Royle)

neighbour, the seventh earl of Kinnoul. Limestone from the district, particularly that from Marr, had long been widely used. It had been exported from Doncaster for use in the building of Westminster Hall and for royal works at Calais in the fourteenth and fifteenth centuries.[85] In 1739, a first consignment of 37,000 bricks was purchased and work actually began early in 1740, with the digging of the foundations. In the present context, the timing of the decision actually to begin work is significant. It occurred a few months after Wrightson, in his final promotion, was assigned the Anglia accounts in the Pipe Office. His finances were now sufficiently secure and substantial to begin to build an entirely new house. Work continued over the next eight years and by the time the accounts were finally settled in 1748, it appears that in building his four-storied, seven-bayed house he had spent £3,700. Such was his pride in the new house that in 1743, anticipating its completion, he commissioned an engraving of the floor plan and the elevation of the principal, north, front.[86]

Scarcely had the house been completed than Wrightson began planning significant additions, commissioned from James Paine, a young man who was making a local reputation after his work on the designs for the civic mansion house for the borough corporation in the nearby town of Doncaster.[87] It is possible that the motivation to do this came not from Wrightson himself but from his newly-married daughter and son-in-law, William Battie of Warmsworth, who were to inherit the house on his death. His initial dealings with Paine were the reverse of those with Platt. Paine's initial estimate for building a single-storey chapel wing on the west and a library wing on the east was £894. Wrightson, perhaps comparing the cost of these extensions relative to that of the completed house, looked for economies and asked for a costing if, as before, he found many of the raw materials. Paine produced an amended estimate of £629, reduced soon afterwards by leaving the rooms under the chapel and library unfinished, to £594. He was also commissioned to make cosmetic alterations to the south front.[88] When the accounts were settled in 1754, Paine's works had cost in excess of £1280, or a third as much as Platt's entire house.[89] His daughter and son-in-law were to set about the work of landscaping the grounds in the 1760s, as soon as they inherited, employing Richard Woods as their landscape gardener.[90] The new Cusworth Hall, a country seat for a sinecurist, had become William Wrightson's permanent ornament to the Yorkshire landscape.

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[85] R. A. Brown, H. M. Colvin and A. J. Taylor, *The History of the King's Works*, vol. 1, (London, 1963), pp. 441 and 529.

[86] The cost of the engraving by a Mr Seale and the materials for it cost £4 13s 0d. As usual, this London commission was delegated to William Whitehead (DA, DDBW/P/15). The plate is to be found at DA, DDBW/H/127. Wrightson's Account Book, 1725–1758, which includes his 'New House Account' and accounts with individual building craftsmen, is to be found at DA, DDBW/A/1.

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[87] See P. E. Leach, *James Paine*, (London, 1988), especially pp. 181-2. Paine's letters to and estimates for Wrightson, 1749-54, are to be found at DA, DDBW/H/60-85. A commentary on the work in the house is included in G. Beard, *Georgian Craftsmen and their Work*, (London, 1966), pp. 60-62. When E. Croft-Murray wrote his *Decorative Painting in England 1537-1837* (Feltham, 1970), p. 290, he noted that none of the ceiling paintings executed by Samuel Wale in any property could then be identified, but since then those on the ceiling of the chapel by Wale at Cusworth Hall have been recovered in the course of its renovation in 2007. Wale was paid £110 5s 0d. for his work in painting the chapel and the library (Account Book 1749-1754, DA,DDBW/H/102). The painted ceiling of the library has not been uncovered to date. I have benefited from discussion with Julie Harrup and Frank Carpenter, curators of Cusworth Hall, Museum and Park, on these matters.

[88] Paine's published engraving of the south front, showing his improvements, was an elaboration of the actual design rather that an accurate representation, a fact he acknowledged in a letter to Wrightson of 20 June 1750 (DA, DDBW/H/68). Engraving plates for Paine's south front and the floor plans of his additions can be found at DA, DDBW/H/129 and 130. Paine similarly exaggerated the scale of his commission for the civic mansion house Doncaster, including two wings supposedly to house the town clerk and the recorder in the published *Plans Elevations and Sections and other Ornaments of the Mansion House belonging to the Corporation of Doncaster* (1751) that were neither commissioned nor built.

[89] See also R. Wilson and A. Mackley, *Creating Paradise: the Building of the English Country House, 1660-1880*, (London, 2000), pp. 256, 263, 265 and 290-292 for a discussion of the costs of building set in the context of other gentry seats. Wilson calculates the cost of Platt's work at £3,734 and Paine's at £1,586, whereas the present author's calculations are £3,679 and £1,281.

[90] Woods' memoranda for the work are to be found at DA, DDBW/H/104-119 and the accounts for the work in DDBW/A/3. The work is considered in B. E. Coates, 'The works of Richard Woods, landscape gardener, in the West Riding of Yorkshire', *Transactions of the Hunter Archaeological Society*, III part 5 (1963); and, most recently and in the context of his whole career, in F. Cowell, *Richard Woods (1715-1793) Master of the Pleasure Garden* (Woodbridge, 2009), especially pp. 43-6, 96, 129-130 and 191-3.

Appendix: Clerks and Attorneys in the Pipe Office 1732–1833

A list of the attorneys and board's end clerks is given in a memorial of 1732, which provides the opening date for this list of the fifty-five clerks and attorneys who are known to have been employed in the Pipe Office from that date. With one exception, this list appears to be complete.[1] A further list of March 1756, detailing all the staff of the Office, with the date of the clerks' articles and identifying the kinship between them and their masters, is among the papers of William Wrightson, as are lists of attorneys and their fees dating from 1722 to 1741.[2] From 1756, beginning with entry no. 16 below, the information comes from the Board's End Books of the Pipe Office, 1756–1833.[3] These books do not record successive promotions once the writing clerk had risen into the ranks of the sworn clerks or attorneys. However, since these were strictly governed by seniority of appointment, enforced, where there was dispute, by the Exchequer Court, the subsequent careers of the attorneys can be readily deduced.[4] Those listed as in post on 14 October 1833 were entitled to compensation for loss of office.[5]

1. Charles Hornby: writing clerk articled about 1691; sixth attorney by Michaelmas 1698, fifth by Michaelmas term 1701 and first by 1722; Second Secondary by 1724; First Secondary by 1730; deceased by 19 Sept. 1739. Son of Joseph Hornby, attorney, of Furnival's Inn; prolific Tory pamphleteer 1710–22; bequeathed property in Yorkshire 1739; see also nos. 5, 14 and 30.[6]

2. William Wrightson: writing clerk from about 1694; sixth attorney by Michaelmas term 1698, second by 1722 and first by 1724; Second Secondary by 1730; First Secondary by 1741; bapt. Dec. 1676; died 4 Dec. 1760. Second son of Robert Wrightson of Cusworth, West Riding, attorney and landowner. See also no. 7.[7]

3. Robert Cranmer: fifth attorney by 1722, fourth by 1729, third by 1730; Second Secondary by 1741; First Secondary 1760; died 14 May 1776.[8] A member of the Cranmer family of Quendon, Essex. See nos. 12, 16 and 21.[9]

4. Neale Sheldon: sixth attorney by 1722, fifth by 1724, fourth by 1730; died by 26 Feb. 1734.[10]

5. Joseph Hornby: sixth attorney by 1724, fifth by 1730, fourth by 1741, first by Mar. 1756; Second Secondary by 1760; died 30 Oct. 1772; nephew of Charles Hornby (see no. 1). See also nos. 14 and 30.[11]

6. John Maidstone: sixth attorney by 1729, second by 1741; dead by Mar. 1756.

7. William Whitehead: writing clerk articled 1720; third attorney by 1741, second by Mar. 1756; second son of John Whitehead and Mary (sister of William Wrightson); articled to his uncle 1720, who remitted 'the usual fee of £100'; appointed his deputy, 30 May 1730; dead by 6 May 1756. See also nos. 2 and 23.[12]

8. Jerom. Denton: writing clerk [date unknown]; senior board's end clerk in 1732; fourth attorney by 1741; dead by Mar. 1756.

9. Henry Winter: fifth attorney 1741, second by Mar. 1756; Second Secondary 1760; died 25 Aug. 1768.[13]

10. John Brougham: junior board's end clerk by 1732; sixth attorney by 1741; dead by 2 Dec. 1741; will specifies burial at St Andrew, Holborn or at Skelton, Cumberland, near the remains of his family.[14]

11. Charles Lowe Whytell: attorney by 27 July 1745; third attorney by Mar. 1756; Second Secondary probably after 30 Oct. 1772; died 8 Dec. 1774. J.P. for Middlesex; family acquired the manor of Gilmonby, North Riding (in Bowes parish, Co. Durham), in 1626.[15] A Charles Whytell of Furnival's Inn (probably his father) party to a deed of 17-18 May 1721.[16]

12. [–] Cranmer: nephew of Robert Cranmer (see no. 3); writing clerk from an unknown date; 'A Board's End Clerk' at the time of his death in Nov. 1746. See also nos. 3, 16 and 21.

13. James Humphreys: sixth attorney after 1741, fifth by Mar. 1756; dead by 27 Sept. 1763. His brother (died by Mar. 1756) had been articled to him in 1747.[17]

14. Charles Hornby:, eldest son of Joseph Hornby (see no. 5 above); writing clerk 3 Feb. 1741 articled to father; sixth attorney by Mar. 1756; First Secondary May 1776; died 10 May 1780;[18] great-nephew and godson of Charles (see no. 1) and brother of Joseph (see no. 30).

15. John Robinson: son of William Robinson of 'Monktown' (? Monkton, Hebburn) Co. Durham; writing clerk 27 July 1741, fee for articles £126; senior board's end clerk by Mar. 1756; sixth attorney (probably by Apr. 1756); died 15 Feb. 1763.[19]

16. Henry Cranmer: son of Joseph Cranmer; writing clerk 27 May 1742; 'a board's end Clerk' 10 Feb. 1756; sixth attorney by 20 Dec. 1760; First Secondary by 2 Dec. 1797; dead by 4 May 1811. See also nos. 3, 12 and 21.

17. Robert Winter: writing clerk 17 Feb. 1743; third writing clerk by Mar. 1756; sixth attorney 25 Feb. 1763; dead by 11 May 1803.

18. Thomas Airey: writing clerk 21 May 1745, fee for articles £100; fourth writing clerk by Mar. 1756.[20]

19. James Farrar: writing clerk 27 July 1745; sixth attorney 27 June 1763; First Secondary by 15 Apr. 1820; born 14 Sept. 1733, eldest son of Rev. James Farrar, incumbent of Brignall, Co. Durham; fee for articles of £110; died 26 Jan. 1826 at age of 93; a governor of the Foundling Hospital, where he was buried.[21]

20. Tomlinson Bunting: writing clerk 8 Feb. 1745; junior board's end clerk 25 Feb. 1763; senior board's end clerk 27 Sept. 1763; sixth attorney 29 Sept. 1768; son of Elizabeth and William Tomlinson, rector of Skelton, near York; died 17 Dec. 1768, aged 32; buried at Skelton, St Giles.[22]

21. James Cranmer: writing clerk 25 Nov. 1746; junior board's end clerk 27 Sept. 1763; senior board's end clerk 29 Sept. 1768; sixth attorney 30 Dec. 1768; dead by 1 Dec. 1801; cousin of Robert Cranmer (see no. 3). See also nos. 3, 12 and 16.

22. Henry Derby Gardiner: writing clerk 21 May 1747; eighth writing clerk by Mar. 1756.

23. Charles Bromley: writing clerk articled to his natural father William Whitehead (see no. 7) on 5 Nov. 1751; ninth writing clerk by Mar. 1756.[23]

24. Walter Humphreys: writing clerk articled 28 Nov. 1747 to James Humphreys, his brother; dead by Mar. 1756.

25. Peter Sykes: writing clerk articled 17 June 1755; junior board's end clerk 29 Sept. 1768; senior board's end clerk 30 Dec. 1768; sixth attorney 16 Dec. 1772; dead by 18 May 1798.

26. Allatson Burgh: son of Cornelius Burgh of Scarborough, cursitor in the court of Chancery; writing clerk 10 Feb. 1756; junior board's end clerk 30 Dec. 1768; senior board's end clerk 16 Dec. 1772; sixth attorney 24 Jan. 1775; dead by 10 May 1815. Second son, baptised at Scarborough 12 Mar. 1742. [24] For his three sons, see nos. 41, 42 and 44.

27. Daniel Crofts: second son of Mr John Crofts of Lincoln's Inn; writing clerk 25 Mar. 1756; junior board's end clerk 8 June 1774; senior board's end clerk 24 Jan. 1775; sixth attorney 4 June 1776; dead by 27 Sept. 1785.[25]

28. James Paine: writing clerk (? Apr. 1756); junior board's end clerk 4 June 1776; senior board's end clerk 2 June 1780; sixth attorney 9 Feb. 1786; Second Secondary by 9 Nov. 1827; died 5 May 1829.

29. John Heaton: nephew of Thomas Heaton of Lincoln's Inn; writing clerk 30 Apr. 1756; junior board's end clerk 24 Jan. 1775; senior board's end clerk 4 June 1776; sixth attorney 2 June 1780; died 3 Sept. 1818.

30. Joseph Hornby: younger son of Joseph Hornby, Second Secondary; writing clerk 20 Dec. 1760; junior board's end clerk 2 June 1780; senior board's end clerk 9 Feb. 1786; dead by 25 Apr. 1793. See also nos. 1, 5 and 14.

31. John Wolfe: writing clerk 20 Apr. 1763; junior board's end clerk, probably 9 Feb. 1786; senior board's end clerk 25 Apr. 1793; sixth attorney 18 May 1798; first attorney by 17 Mar. 1827; died 1 June 1827. Son of Thomas Wolfe of Saffron Walden who was town

clerk of Saffron Walden on 13 Feb. 1743, mayor on 6 Feb. 1760 and alderman on 12 Dec. 1761.[26]

32. John Raper: writing clerk 2 May 1766; junior board's end clerk 25 Apr. 1793; senior board's end clerk 18 May 1798; attorney 1 Dec. 1801; second attorney by 17 Mar. 1827; died 3 July 1824. Son of John Raper of York; father (bapt. 30 Dec. 1724), was eldest son of John Raper, town clerk of York from 18 Dec. 1749; the son bapt. at York 18 Jan. 1753. In the earliest York city directory of 1781, Raper, Townsend and Woolly appear as attorneys.[27] See also No. 47.

33. William Franks: son of William Franks; writing clerk 30 Dec. 1766.

34. William Preston: son of Robert Preston of Stockton-on-Tees (Co. Durham); writing clerk 25 Oct. 1765; no baptism found for William, but see no. 36.

35. Charles Heblethwayte: writing clerk 6 Feb. 1769; junior board's end clerk, probably 18 May 1798; senior board's end clerk 1 Dec. 1801; sixth attorney 11 May 1803; dead by 19 Mar. 1812. Bapt. Bridlington 12 Apr. 1751, the second son of James Heblethwayte of Bridlington (East Riding), lay impropriator of the rectory of Bridlington.[28]

36. Robert Preston: writing clerk 16 June 1769; junior board's end clerk 1 Dec. 1801; senior board's end clerk 11 May 1803; 29 sixth attorney 4 May 1811; third attorney by 17 Mar. 1827; died 28 Oct. 1831. Bapt. Stockton-on-Tees 15 Apr. 1754, younger son of Robert Preston of Stockton-on-Tees, attorney.[30] See also no. 34.

37. Nicholas Sykes: son of Joseph Sykes of Kingston upon Hull; writing clerk 21 Apr. 1774 articled to Peter Sykes. Father sheriff of Hull in 1754 and mayor in 1761 and 1777; subscriber of two shares in the new dock, 1774; patron of the living of St Andrew, Kirk Ella, lord of the manors of Kirk Ella and Foxholes, in the latter of which Rev Cornelius Burgh, elder brother of Allatson, served as rector. Nicholas bapt. Hull, 3 Aug. 1759; died aged 18 in 1778. Articled to Peter Sykes, (see no. 25) which suggests a family connection, although none has been found.[31]

38. John Webster: son of Mary Webster of Stockton-on-Tees; writing clerk 7 Feb. 1775. Bapt. 11 May 1758; his father (buried 8 Dec. 1770) was described as a raff merchant.

39. Edmund Peter Hahn: son of Daniel Hahn, a cursitor in the court of Chancery; writing clerk 19 May 1779.[32]

40. Robert Howard: son of Robert Howard of Quendon, Essex; writing clerk 26 July 1779.

41. Timothy Fysh Burgh: son of Allatson Burgh; writing clerk 4 Apr. 1781. For his father see no. 26 and for his brothers, see nos. 42 and 44.

42. Cornelius Burgh: son of Allatson Burgh; writing clerk 15 Dec. 1785 articled to his fa-

42. Cornelius Burgh: son of Allatson Burgh; writing clerk 15 Dec. 1785 articled to his father; articles set aside by the Court of Exchequer and new articles entered into 15 Nov. 1804; junior board's end clerk 19 Mar. 1812; senior board's end clerk 19 Mar. 1812 [sic]; sixth attorney 10 May 1815; died 25 Feb. 1821. See also nos. 26, 41 and 44.

43. John Blackford: son of Robert Pope Blackford; writing clerk 5 July 1787.

44. Henry Burgh: youngest son of Allatson Burgh; writing clerk 2 Dec. 1797; junior board's end clerk 9 May 1811; senior board's end clerk 19 Mar. 1812; sixth attorney 19 Mar. 1812 [sic]; fourth attorney by 17 Mar. 1827; First Secondary by 14 Oct. 1833. See also nos. 26, 41 and 42.

45. Joseph Condor: of St Mary, Islington; writing clerk 25 July 1805; junior board's end clerk 19 Mar. 1812; senior board's end clerk 10 May 1815; sixth attorney 23 Oct. 1818; fifth by 17 Mar. 1827; Second Secondary by 14 Oct. 1833.

46. John Pattison Panton: of Old Burlington St, parish of St James, Westminster; writing clerk 2 May 1808; junior board's end clerk 4 Aug. 1815; senior board's end clerk 23 Oct. 1818; sixth attorney 15 Apr. 1820; first attorney by 14 Oct. 1833.

47. Henry Raper: one of the sons of John Raper; writing clerk 28 May 1808 articled to his father; junior board's end clerk 23 Oct. 1818; senior board's end clerk 13 July 1821; sixth attorney 19 July 1824: second attorney by 14 Oct. 1833. See also no. 32.

48. Joseph Mullet: of the parish of St Mary le Strand, Westminster; writing clerk 14 July 1815; junior board's end clerk 13 July 1815; senior board's end clerk 4 May 1826; sixth attorney 17 Mar 1827; third attorney by 14 Oct. 1833.

49. William Henry Waldo: son of Henry Waldo of Stepney, Middlesex; writing clerk 14 July 1815; junior board's end clerk 19 June 1821; senior board's end clerk 13 July 1821; attorney 4 May 1826; resigned 10 Mar. 1827.

50. Joseph Edwards: of Robert Street, parish of St Andrew, Holborn; writing clerk 17 July 1815; junior board's end clerk 27 June 1826; senior board's end clerk 17 Mar. 1827; sixth attorney 5 Apr. 1827; fourth attorney by 14 Oct. 1833.

51. James Thomas Horne: son of Edward Horne of Lincoln's Inn Fields; writing clerk 26 Oct. 1818; resigned 2 Apr. 1827 when employed in the Six Clerks' Office.

52. James Henry Jaquet: son of John Louis Jaquet of West Drayton, Middlesex; writing clerk 10 Dec. 1818; junior board's end clerk 5 Apr. 1827; senior board's end clerk 14 July 1827; sixth attorney 13 May 1829; fifth attorney by 14 Oct. 1833.

53. Charles Panton: son of John Pattison Panton, senior board's end clerk; writing clerk 1 Mar. 1819; junior board's end clerk 14 July 1817; senior board's end clerk 13 May 1829;

54. James Bate: son of William Bate of West Drayton, Middlesex; writing clerk 4 Mar. 1819; junior board's end clerk 13 May 1829; 'board's end clerk' by 14 Oct. 1833.

55. Abraham Victor Mocatta: son of H. Mocatta of Burton Crescent; writing clerk 20 Apr. 1821; died Sept. 1829.[33]

Notes to the Appendix.

1. Only one attorney, Robert Surtees, to whom Robert Winter (no. 17) was articled, is not otherwise known. Lists of attorneys alone from 1698 to 1703 are to be found at Stratford upon Avon Birthplace Trust, Library and Archives, Archer of Tanworth, DR/3/Box 100.
2. DA, DDBW/23/7, Letter of William Whitehead to William Wrightson, 3 Mar. 1756 and DA, DDBW/22/5-7, Lists of Assignments in the Pipe Office, (and see also Table 1 above).
3. TNA, E 369/69-81; there are no entries in books 68, 76 and 77 and one entry only in 70.
4. A case of the Exchequer Court deciding on a contested seniority is to be found in an order obtained by Henry Burgh in 1811 (TNA, Board's End Book, 1794–1799).
5. TNA, E 369/79 and 81.
6. Birthplace Trust, DR 37/2/Box 100; DDBW/P/22/6; *Gentleman's Magazine*, 9 (1739), p. 496; TNA, PROB 11/698; British Library, *English Short Title Catalogue* on-line. Hornby's career is the subject of B. Barber, 'The "Learned and Curious" Charles Hornby (1670–1739), Political Pamphleteer and Public Servant', (forthcoming).
7. Birthplace Trust, DR 37/2/Box 100; DA, DDBW/P/12; *Gentleman's Magazine*, 30 (1760), p. 594.
8. TNA, PROB 11/1019.
9. Essex Record Office, Cranmer–Byng Family archives (D/DYv, especially item 347); cousin identified by William Whitehead in DA, DDBW/22/5; *Gentleman's Magazine*, 46 (1776), p. 240.
10. TNA, Board's End Book, 369/67.
11. TNA, PROB 11/698 for Charles senior and *Gentleman's Magazine*, 9 (1739), p. 496; TNA, PROB 11/916 for Joseph Hornby, and *Gentleman's Magazine*, 42 (1772), p. 543.
12. DA, DDBW/T/1, Account Book of William Wrightson for legacies to the Whitehead family, 1717–1748; DDBW/P/23/1, Deed of appointment as attorney to William Wrightson, 30 May 1730; DA, DDBW/P/23 and TNA, PROB 11/823, Copy will of William Whitehead, 5 Feb. 1750 and codicil 2 Oct. 1752.
13. *Musgrave's Obituary*, Publications of the Harleian Society, vols. 44-49 (1899–1901).
14. TNA, PROB 11/714.
15. Bulmer and Co., *History, Topography and Directory of North Yorkshire* (Preston, Lancs., 1890) p. 384; *Gentleman's Magazine*, 44 (1774), p. 598; TNA, PROB 11/1018. The parish register of Bowes contains many entries that show that the Whytells or Whitells of Gilmonby were resident locally from at least 1573 up to the burial of Charles Lowe Whytell 'from London brought' on 26 Dec. 1774.
16. North Yorkshire County Record Office [NYCRO], Kiplin Hall Archive, ZBL I/1/1/12-13.
17. DA, DDBW/P/25/2.
18. TNA, PROB 11/1065; *Gentleman's Magazine*, 46 (1776), p. 240.
19. DA, DDBW/P/23/3, Articles of clerkship, 21 May 1745.
20. DA, DDBW/P/22/5, Letter of William Whitehead to William Wrightson, 3 Mar. 1756.
21. Rev. W. Oliver, *Rev. James Farrar, vicar of Brignall, 1739–1780*, Teesdale Record Society, no. 8 (1942).
22. I am grateful to Mr. Brian Gillie for locating Bunting's monumental inscription in the south aisle

22. I am grateful to Mr. Brian Gillie for locating Bunting's monumental inscription in the south aisle of the parish church of Skelton, St Giles.

23. DA, DDBW/P/23, Will of William Whitehead, 5 Feb. 1750.

24. NYCRO, Scarborough parish register transcripts; TNA, PROB 11/694, will of Tristram Fysh, 1738; East Riding CRO, zDDX301/2/1, copy deed of partition of the estates of T. Fysh, 1742.

25. TNA, PROB 11/113.

26. Essex CRO, D/B2/QSS/7/14 and D/B2/TDS/3/4/13, sacrament certificates for Saffron Walden, nos. 103 and 165; *Gentleman's Magazine*, 65 (1795), p. 535.

27. York City Archives, M22, p. 356, R. H. Skaife, 'A catalogue of the Mayors and Bailiffs (etc)', manuscript, late nineteenth century.

28. R. H. S.Skaife, *The Register of Marriages in York Minster... 1681 to 1762* (1873); University of York, Borthwick Institute for Archives, bishop's transcripts for Bridlington, 1600–1873; Yorkshire Archaeological Society, Heblethwayte of Bridlington papers (MD 259); *VCH County of York. East Riding, vol. 2*, ed. K. J. Allison (Oxford, 1974), pp. 40-1 44-5 and 73; J. S. Purvis, *Bridlington Charters, Court Rolls and Papers XVIth-XIXth Century*, (1926), Appendix C; D. Neave, Port, *Resort and Market Town: Bridlington* (Hull, 2000) p. 149.

29. TNA, E 369/74, Board's End Book 1794-1799.

30. Information for entries nos. 36 and 38 kindly supplied by Mrs C. Wood of Stockton-on-Tees Library Service, from copies of the Stockton-on-Tees parish registers.

31. J. Tickell, *The History of the Town and County of Kingston upon Hull*, (Hull, 1798), pp. 683, 684, 863 and 887; Hull City Library, Hull, Holy Trinity baptism register; J. Foster, *Pedigrees of County Families of Yorkshire, East and North Riding*, (London, 1874), Sykes of Sledmere, Roos, etc.

32. TNA, E 214/1247.

33. Burton Crescent, the location of which is described in J. Elmes, *A topographical dictionary of London and its environs* (1831), was renamed Cartwright Gardens in 1908.

THE SEVENTH EARL OF CARLISLE AND THE CASTLE HOWARD ESTATE: WHIGGERY, RELIGION AND IMPROVEMENT, 1830–1864

By David Gent

This article explores the role played by the early-Victorian Whig aristocrat and politician, George Howard (1802–1864), seventh Earl of Carlisle, in improving his estate at Castle Howard in the North Riding. Carlisle instigated numerous changes in the productive landscape of the estate, and attempted to reform the social and moral condition of his tenantry through a number of projects. The article places those developments in the context of Carlisle's political and religious values. In doing so, it poses a challenge to the existing historiography on both the history of Whiggery and of the country house.

Castle Howard is one of Britain's most iconic country houses.[1] Built at the start of the eighteenth-century by Sir John Vanbrugh for the third Earl of Carlisle, it is now one of Yorkshire's most important tourist attractions. Yet to-day's visitors glimpse only one aspect of its history, touring the house and grounds without seeing the working estate with which they were once inextricably connected.[2] In its nineteenth-century heyday, this comprised 13,065 acres on the eastern border of the North Riding. It included the villages of Welburn, Bulmer, Coneysthorpe, Terrington, a sizable part of Slingsby and numerous hamlets, making it one of the most important estates in the region. This article analyses the pivotal role played by George William Frederick Howard (1802–1864), seventh Earl of Carlisle, in developing the estate. It details both the improvements Carlisle made to his land and his efforts to reform the condition of the estate population.

Carlisle was the eldest son of George Howard (1773–1848), sixth Earl of Carlisle, and Georgiana Cavendish, the daughter of the famous Whig hostess Georgiana, Duchess of Devonshire. Heir to one great Whig dynasty and related to several more, he was encouraged to enter the political world from an early age. As Lord Morpeth (the title by which he was known from 1825 until succeeding to the peerage in 1848), he sat as Whig MP for Yorkshire between 1830 and 1832 and then (after the Reform Act) the West Riding until 1841, returning between 1846 and 1848. He held the posts of Chief Secretary and Lord Lieutenant of Ireland under Melbourne and Palmerston respectively, and was Chief Commissioner of Woods and Forests in Lord John Russell's Government, during which time he passed the pioneering Public Health Act of 1848.[3]

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[1] The essay on which this article is based won the Yorkshire Society's Beresford History Prize for 2009. The research presented here is part of a doctoral thesis on Carlisle funded by the AHRC's Collaborative Doctoral Award scheme. I am grateful to the AHRC for their support, and to the Castle Howard Estate for encouraging the collaboration and for permission to quote from the Carlisle papers. I would also like to thank Miles Taylor, Allen Warren, Christopher Ridgway and Janette Martin for their comments on various versions of this paper.

[2] The foundation of the house is detailed in Charles Saumarez Smith, *The Building of Castle Howard* (London, 1990).

Carlisle's eventful career has ensured that he appears in many accounts of nineteenth-century politics. In comparison, his actions at Castle Howard have received little scholarly attention. Indeed, despite the fact that they owned some of the nation's greatest country houses, there have been remarkably few studies of the Whigs as landowners. Whiggery has often been depicted as a fundamentally metropolitan creed, which scorned rural life as boring and backward. This view presents it as synonymous with the capital's exclusive salons and rakish society.[4]

This interpretation arguably applies more comfortably (if still perhaps problematically) to late eighteenth-century Whiggery under the leadership of Charles James Fox than to Carlisle's era, but it has nevertheless profoundly shaped historiography on the later period. Peter Mandler, for instance, has suggested that early-Victorian Whiggery was heavily influenced by a metropolitan aloofness from provincial affairs. This, he argues, underpinned the Whigs' willingness to employ the central (rather than local) state to tackle social problems, as seen in Carlisle's legislation on public health. Carlisle has been seen as emblematic of this metropolitan tradition in Whiggery.[5] It is a view of him which will be confronted in this article, which illustrates his extensive interaction with the Castle Howard estate.

Recently, Joe Bord has challenged the London-centric view of Whiggery by emphasising the importance of the land and its cultivation to the Whigs' progressive identity, thus reclaiming agriculturalists such as Coke of Norfolk as part of the Whig tradition.[6] The first section of this essay will show how Carlisle similarly promoted agricultural improvement and other means of economic development. Less directly, the association between Whiggery and fashionable metropolitanism has arguably been further questioned by studies which have revealed the Whigs' participation in the nineteenth-century religious revival. Carlisle was one of a number of early-Victorian Whigs who – unlike their fathers' generation – were ardently religious.[7] The second section details Carlisle's religious beliefs, which, it is suggested, were expressed far more comfortably at Castle Howard than in the capital.

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[3] To avoid confusion, Carlisle is referred to by that name throughout this article regardless of chronology. References give correct titles for that particular date. For further details of his national career, see Diana Davids Olien, *Morpeth: A Victorian Public Career* (Washington, 1983).

[4] See in particular Leslie Mitchell, *The Whig World: 1760–1837* (London, 2005), pp. 39-77.

[5] Peter Mandler, *Aristocratic Government in the Age of Reform: Whigs and Liberals, 1830–1852* (Oxford, 1990), pp. 6, 53. See also Benjamin Weinstein, 'Metropolitan Whiggery, 1832–55', in *London Politics, 1760–1914*, ed. Matthew Cragoe & Antony Taylor (Basingstoke, 2005), pp. 57-74.

[6] Joe Bord, *Science and Whig Manners: Science and Political Style in Britain, c. 1790–1850* (Basingstoke, 2009), pp. 102-29.

Importantly, historians such as Richard Brent and Jon Parry have illustrated how the Whigs' political thought was influenced by their faith, underpinning central themes in early-Victorian Whig politics such as the promotion of religious tolerance and education. In doing so, they have broadened our understanding of Whiggery beyond Westminster, locating it within that current in nineteenth-century liberal thought which sought to foster social harmony, build a virtuous population and encourage the fulfilment of human potential.[8] The final section will show how Carlisle implemented similar values at Castle Howard, seeking to raise the moral, social and spiritual character of his tenants through a number of projects. As will be seen, these had a significant impact on the estate villages.

DEVELOPING THE ESTATE

The Castle Howard estate provided only a part of the land, wealth, status and power which defined the Howards as members of Britain's aristocratic élite. They also owned over 47,000 acres in Cumberland clustered around their second residence of Naworth Castle, and an additional 17,780 acres in Northumberland. The latter estate was centred on the market town of Morpeth, the family borough, for which the young Carlisle sat as MP between 1826 and 1830. Cumberland was another site of political influence; a Howard sat for Cumberland East for nearly all of the period between 1840 and 1886.

The Howards' Yorkshire tenants did tend to vote loyally with the family, doing so particularly enthusiastically when Carlisle represented them as MP for Yorkshire.[9] Nevertheless, the family's political influence in the region was limited, with the Earls Fitzwilliam controlling the nearest borough of Malton.[10] In terms of income, too, the Castle Howard estate was not of key importance to the Howards. A mixture of fertile arable land and pasture, it yielded £10,599 in rent in 1830, rising to £12,050 by 1857. Sales of timber fetched an additional £3,000 each year on average.[11] However, it contained none of the mineral resources or urban property which tended to inflate the incomes of super-rich landowners. In contrast, the Naworth estate included a number of coal mines, which combined with agricultural rents to generate an estimated £23,520 in 1844. The Morpeth estate, too, had a few small mines and some valuable urban holdings, bringing in £14,600 in 1844.[12]

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[7] Richard Brent, *Liberal Anglican Politics: Whiggery, Religion and Reform, 1830–1841* (Oxford, 1987), pp. 123-39.

[8] Jonathan Parry, 'Past and Future in the Later Career of Lord John Russell', in *History and Biography: Essays in Honour of Derek Beales*, ed. T. Blanning & D. Cannadine (Cambridge, 1996), pp. 142-72; Brent, *Liberal Anglican Politics, passim*.

[9] Carlisle MSS (Castle Howard), CH/F5/112, Election Papers.

[10] E. A. Smith, 'Earl Fitzwilliam and Malton: A proprietary borough in the early nineteenth century', *English Historical Review* [*EHR*], 80 (1965), 51-69.

[11] CH/F5/5, Annual Accounts for Castle Howard Estate.

Crucially, however, Castle Howard had long been the main residence of the Howards, and as such evoked strong emotion among the family. It would not be an exaggeration to say that Carlisle was in love with what he fondly called the 'airy domes and sculptured halls' of his Yorkshire home.[13] Though he readily repaired Naworth Castle after it was gutted by a devastating fire in 1844, he seems to have spent little time on his estates outside Yorkshire. Nor, importantly, was he especially keen on the metropolis. An analysis of his diary suggests that he spent an annual average of approximately 46 percent of his time at his London townhouse. However, in 1844 and 1845, when he was out of Parliament and hence not obliged to attend duties at Westminster, he spent just 13 percent of his time in London, compared with 69 percent in Yorkshire.[14]

Castle Howard clearly held deep attractions for Carlisle. He appreciated its 'very picturesque' scenery, adding to this in the early 1850s by employing the landscape architect W. A. Nesfield to install the celebrated Atlas fountain and build an elaborate parterre.[15] The house also gave the Earl, one of twelve children, an arena in which to spend time with his family. Ruth Larsen has recently drawn attention to the ways in which country houses gave their inhabitants space to perform enjoyable domestic roles.[16] Castle Howard certainly did this for Carlisle. A lifelong bachelor, he nonetheless enjoyed close relationships with his sisters and with his mother Georgiana, to whom he declared himself 'married together for life'. He recorded that 'Castle Howard in fine weather with my mother … is very delicious to me'.[17]

Carlisle was highly involved in the local community around Castle Howard. He was a keen participant in the ethos of sociability which characterised Victorian landed society, regularly riding 'in quest of visits' to the neighbouring squires.[18] Although averse to hunting and shooting, he contributed to local sport by establishing the Castle Howard cricket club: scoring for the team was his only self-confessed hobby.[19] In local government, too, Carlisle was also an active poor law guardian and magistrate from the early 1840s, and followed in his father's footsteps to become Lord Lieutenant of the East Riding in 1847. A reminder of Carlisle's connection to the district is visible today in the Carlisle Memorial Column on the approach to the house, which was erected by the Yorkshire gentry in August 1867.[20]

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[12] CH/F6/7, List of Receipts and Payments for All Estates.

[13] George Howard, seventh Earl of Carlisle, *Lines on Yorkshire by the late Earl of Carlisle, written in 1832* (Printed for private circulation, 1864).

[14] CH/J19/8, Diary of seventh Earl of Carlisle (hereafter Carlisle diary). Figures based on an analysis of this diary for 1844–1852.

[15] CH/J19/8/23, Carlisle diary, 19 May 1850. For Nesfield's work, see Christopher Ridgway, 'Design and Restoration at Castle Howard', in *William Andrews Nesfield: Victorian Landscape Architect*, ed. Christopher Ridgway (York, 1996), pp. 39-52.

[16] Ruth Larsen, 'Dynastic Domesticity: The Role of Elite Women in the Yorkshire Country House, 1685–1858' (PhD thesis, University of York, 2003), pp. 64-85.

[17] CH/J18/3/69/3, seventh Earl Carlisle to Georgiana Carlisle, 30 Dec. 1852; CH/J19/8/24, Carlisle diary, 15 Aug. 1850.

Carlisle's participation in local society was underpinned by his involvement in the management of the estate. He gradually took control of estate business from his ailing and gout-ridden father in the early 1840s, inheriting in 1848. His engagement with the estate was at its most intense from around 1840 until 1855, when his appointment as viceroy of Ireland forced him to reside in Dublin for most of the year. The running of such a great estate was, of course, a complex business. Fortunately, the Howards had secured the services of James Loch, the greatest estate commissioner of the nineteenth century. Loch, a Scottish lawyer and Whig MP, managed the estates of a number of aristocratic families, notably the Dukes of Sutherland who were closely related to the Howards through the 1823 marriage of Carlisle's sister Harriet to the future second Duke.[21]

Loch's work for the Sutherlands must have impressed, for in 1824 he was appointed to manage all the Howard estates in a bid to work off the fifth Earl of Carlisle's massive debts, which totalled £220,000. Loch set about cutting wasteful expenditure and implemented long-term plans of development for all the estates.[22] As Eric Richards has noted, Loch regarded estate improvement as a moral duty that would contribute to social progress and benefit landlord and tenant alike.[23] His role was primarily strategic, and he installed the energetic John Henderson as resident agent to manage day-to-day operations on the Yorkshire estate.

The two men found a willing ally in Carlisle, who was eager to develop the agricultural landscape of his estate. His period of ownership coincided with perhaps the most significant period of agricultural improvement in English history, as landowners implemented a capital-intensive system of 'high-farming' based around the application of science and machinery.[24] As might be expected from their progressive views of society, Whig aristocrats such as the fifth Duke of Bedford had been among the first to embrace the possibilities of scientific agriculture at the end of the eighteenth-century. By the 1840s, Whigs such as the seventh Duke of Bedford at Woburn, the third Earl Spencer at Althorp and Carlisle's brother-in-law Lord Burlington (later seventh Duke of Devonshire) at Holker and later Chatsworth were all noted for their contributions to agriculture.[25]

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[18] CH/J18/3/60/8, Lord Morpeth to Georgiana Carlisle, not dated.

[19] CH/F5/3, Lord Morpeth to John Henderson, 25 May [1845].

[20] *Leeds Mercury*, 14 Aug. 1867, p. 3.

[21] Eric Richards, *The Leviathan of Wealth: The Sutherland Fortune in the Industrial Revolution* (London, 1973), pp. 20-32.

[22] CH/F6/58, Memorandum by Loch on estate affairs.

[23] Richards, *Leviathan of Wealth*, pp. 31-2.

[24] Susanna Wade Martins, *Farmers, Landlords and Landscapes: Rural Britain, 1720–1870* (Bollington, 2004), pp. 13-17.

Although not as knee-deep in the country mud as some of these men, Carlisle had an interest in agriculture (even occasionally taking a turn at the plough) and sought to promote similar scientific practices.[26] Under the sixth Earl, Castle Howard had been most famous in farming circles for its pedigree short-horned cattle. Carlisle's interests, however, seem to have lain in the cultivation of land rather than in stock breeding. He turned first to drainage, which was thought to underpin all other improvements. In this he was supported by Loch, who had published an account of the benefits of drainage on the Sutherland estates. Jon Finch has recently detailed how Loch implemented irrigation and the construction of water-meadows around Castle Howard in the late 1820s, thereby increasing hay production.[27]

The Howards' Yorkshire tenants were also encouraged to drain by the provision of tiles subsidised by the estate. Loch wished to extend drainage around Castle Howard in the late 1830s, after experiments on the less fertile Morpeth estate had proved beneficial. Although the sixth Earl of Carlisle wished to increase drainage, he was sceptical about the potential return on large-scale expenditure.[28] The seventh Earl proved to be more positive. His period of control of the estate saw a marked increase in the amount spent on drainage on the Howards' Yorkshire land: the total allocated for this in the estate accounts increased from £542 in 1845 to £1,285 in 1850.[29] A. D. M. Phillips has traced a similarly heavy investment on the Cumberland and Morpeth estates at this time. This increase may have reflected the introduction of drainage for (rather than by) tenants, Carlisle having been impressed by the effect of this practice on the Sutherland estates.[30]

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[25] David Brown, 'Reassessing the influence of the aristocratic improver: the example of the fifth Duke of Bedford (1765–1802)', *Agricultural History Review* [*AgHR*], 47 (1999), 182-95; Bord, *Science and Whig Manners*, pp. 103-10; E. A. Wasson, 'The Third Earl Spencer and Agriculture, 1818–1845', *AgHR*, 26 (1978), 89-99.

[26] CH/J19/8/1, Carlisle diary, 11 and 16 Nov. 1843.

[27] Jon Finch, 'Pallas, Flora and Ceres: Landscape Priorities and Improvement on the Castle Howard Estate, 1699–1880' in *Estate Landscapes*, ed. Jon Finch & Kate Giles (Society for Post-Medieval Archaeology Monograph, 2008), pp. 19-37.

[28] CH/F5/91, Drainage Papers; CH/F6/3, sixth Earl of Carlisle to James Loch, 12 Nov 1841.

[29] CH/F5/5, Castle Howard Annual Accounts.

[30] A. D. M. Phillips, *The Underdraining of Farmland in England During the Nineteenth Century* (Cambridge, 1989), pp. 95, 149-62; CH/J19/8/1, Carlisle diary, 11 Oct. 1843.

Carlisle's enthusiasm for drainage was informed by his political involvement with the topic. He became versed in its value when managing the Crown's lands as Chief Commissioner of Woods and Forests, and participated in consultations about the medical benefits of removing stagnant water when framing public health legislation. Through these duties he met Josiah Parkes, the greatest Victorian expert on drainage, whom he employed to manage some works around Morpeth and whose system of 'deep drains' he introduced around Castle Howard.[31]

Crucially for the estate, Carlisle was also one of three Inclosure Commissioners charged with administering the Public Money Drainage Act of 1846. This allowed the state to provide loans for landowners for drainage, accompanied by state inspection and advice. Carlisle obtained £10,000 under this Act in 1848, split between the Morpeth and Yorkshire estates. Although this money was notionally obtained under his father's name, it seems to have been Carlisle who drove the application.[32] Carlisle was also able to use his parliamentary role to provide another vital improvement to his Yorkshire land in the shape of the 1846 Rye and Derwent Drainage Act. This was a response to the regular flooding of the River Derwent, which frequently devastated the crops of the Howards' tenants. In conjunction with other local landowners such as Earl Fitzwilliam and Sir William Worsley of Hovingham, Carlisle formulated a private bill to prevent the flooding by removing mill dams along the river. It was he who sponsored the Act through the Commons in 1846.[33] Collectively, the extensive drainage of the Yorkshire estate had a beneficial if not spectacular effect, improving the quality and productivity of land and generating a slight increase in rent.[34]

Alongside drainage, Carlisle, like many of his fellow Whigs, had an abiding interest in high farming. He regularly attended lectures and shows organised by the Yorkshire Agricultural Society, an inspiration for the later Royal Agricultural Society. Founded in 1837 by the third Earl Spencer among others, this body aimed to encourage the application of scientific agriculture. Carlisle acted as the Society's President in 1849 and 1855.[35] In 1845, he used its annual show to promote his most significant contribution to local agriculture: the York Yeoman School. This school was designed to provide an education for the sons of local farmers. The need for such an institution had long been felt in Yorkshire, a fact mentioned to Carlisle by Robert Wilberforce, Archdeacon of the East Riding, in late 1844.[36] Carlisle took up the idea with zeal. Assisted by a conclave of local agriculturalists, he drew up plans and worked to raise the necessary contributions.[37]

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[31] Phillips, *Underdraining*, p. 164; Chadwick Papers (University College London, Special Collections), 1055, IV, f. 552, seventh Earl of Carlisle to Edwin Chadwick, 29 Dec. 1848.

[32] CH/F5/91, Castle Howard Drainage Papers; *Parliamentary Papers*, Drainage of Land: A return of applications for advances under the act 9 & 10 Vict. c. 101, 1847 (146), xxxiv.315.

[33] CH/J19/8/8, Carlisle diary, 8 Sept. 1845; CH/J18/3/67/62, Lord Morpeth to Georgiana Carlisle, 11 May [1846].

[34] CH/F5/91, Castle Howard Drainage Papers; CH/F5/8/12, Report by John Henderson on changes on the estate, 1845–54.

[35] CH/J19/8, Carlisle diary, 11 Oct. 1843, 4 and 8 Aug. 1845. For a detailed account of the Society, see Vance Hall, *A History of the Yorkshire Agricultural Society 1837–1987* (London, 1987).

Carlisle's social and political connections came in useful here; Wilberforce reported that the school was 'supported almost exclusively by the Whig aristocracy'.[38] The school opened in 1846 as an annex to the National Society's Anglican teacher-training college in York, of which Carlisle was a leading patron. His plan was for the students to be taught by the trainee teachers. This reflected Carlisle's belief that a religious education was important for farmers, whom he felt exercised a vital influence on the moral tone of rural society. Nevertheless, Carlisle also expressed the need for the pupils to receive a technical education, noting that 'recent discoveries and experiments in agriculture' had made science of 'vital importance' to farming.[39] The school was among the first of its kind, predating a wave of similar institutions which opened in the 1850s. Whilst it closed in 1858 after a series of financial disasters, Carlisle's pivotal role in establishing the school shows his keen interest in promoting modern agricultural practice.[40]

Carlisle keenly applied these views on the Castle Howard estate. The family owned a demesne farm which, like many, seems to have been used to showcase new techniques rather than to generate profit; certainly it sustained losses throughout the period under discussion. The farm contained a laboratory (known as 'The Manure') under Henderson's control in which experiments of agricultural chemistry were conducted. Carlisle noted hopefully after the trial of one batch of fertiliser that there were 'bits of grass made decidedly greener'. The farm also promoted the use of guano and lime. In this, Carlisle took inspiration from other landowners, having admired the Duke of Sutherland's use of guano at Trentham.[41] He also visited the estates of Yorkshire squires such as the Shawes of Brantingham, approvingly noting that 'all that intelligence can do' was brought to bear on the latter's land.[42]

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[36] Wilberforce MSS (Bodleian Library, Oxford), c.61, f. 25, Robert Wilberforce to Samuel Wilberforce, 27 Apr. 1845.

[37] CH/J19/8/7, Carlisle diary, 7 and 29 Apr. 1845.

[38] Wilberforce MSS (Bodleian Library, Oxford), c.61, folio 43, Robert Wilberforce to Samuel Wilberforce, 18 Aug. 1845.

[39] Lord Morpeth's speech at a meeting of the York Central Diocesan Society for Promoting the Education of the Poor, reported in *Hull Packet and East Riding Times*, 7 Feb. 1845, p. 8.

[40] David Allsobrook, *Schools for the Shires: The reform of middle-class education in mid-Victorian England* (Manchester, 1986), pp. 13-48, 76-8.

[41] CH/J19/8, Carlisle diary, 11 Oct. and 27 Dec. 1843, 8 Aug. 1845.

[42] CH/J19/8/8, Carlisle diary, 4 and 8 Aug. 1845.

The Howards also looked to introduce new agricultural machinery, much of which was purchased from the Beverley-based implement maker, Crosskill: Henderson had cause to complain to Crosskill of a faulty sub-soil plough in 1838, while a local vicar recorded that threshing machines were being used on the estate by 1845.[43] The seventh Earl visited Crosskill's yard several times, purchasing a 'highly ingenious' if 'impractical' harvester from him in 1854.[44] The local tenants do seem to have gradually taken up these new methods. By 1858, Henderson could assure Carlisle that the estate was second-to-none in its agricultural practice.[45]

As a liberal politician and member of the Anti-Corn Law League, Carlisle's encouragement of agricultural improvement had an interesting political dimension. Many free-traders believed that high farming offered a more viable and prosperous future for agriculture than protection under the corn laws; this was a common argument among Yorkshire's liberal landowners.[46] Whilst there is no direct evidence that estate practice at Castle Howard was influenced by Carlisle's views on the corn-law question, he did draw upon his own links to rural life when arguing for free-trade. For instance, during the parliamentary debates on the corn laws in early 1846, he quoted statistics on the price of corn and wages in the Castle Howard district, having first sought further information on this from Henderson.[47]

The Howards provided another notable stimulus to economic progress through the promotion of railways. In the 1820s, the sixth Earl and Loch developed rail links between the family's Cumbrian mines and the town of Brampton.[48] The seventh Earl inherited this enthusiasm, embracing the steam train as one of the marvels of his age. Railways, he once declared, helped encourage the spread of 'material wealth' and 'progressive civilisation'.[49] As Irish Secretary he unsuccessfully promoted a scheme, concocted by his under-secretary, Thomas Drummond, for state-funded railways in Ireland.[50] His enthusiasm was matched by his willingness to invest in railway companies. By 1849 he had amassed shares totalling £38,698, a sizeable proportion of his wealth.[51] A portion of these shares were inherited. Although the transactions for this episode are sketchy, it is possible that the sixth Earl was given some shares as compensation for George Hudson's York–Scarborough line, which ran along the edge of the estate. Castle Howard benefited from a station on the line (which opened in 1845), which increased the house's accessibility.

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[43] CH/F5/2, John Henderson to Mr Crosskill, 19 Sept. 1838; Rev. William Walker, *Some account of the parish and village of Slingsby in Yorkshire* (York, 1845), p. 7.

[44] CH/J19/8, Carlisle diary, 8 Aug. 1845, 21 Aug. 1852, 8 Sept. 1854.

[45] CH/F5/3, John Henderson to seventh Earl of Carlisle, 5 May 1858

[46] See, for instance, the speech of F. H. Fawkes nominating Lord Morpeth at the 1846 West Riding election, reported in *Leeds Mercury*, 4 Feb. 1846, p. 1.

[47] CH/J19/8/10, Carlisle diary, 1 Jan 1846; CH/F5/2, John Henderson to Lord Morpeth, Feb. 1846. For the speech, see Hansard, *Parliamentary Debates* (Third Series), HC, LXXXIII, 13 Feb. 1846, cc. 807-811.

[48] Brian Webb and David Gordon, *Lord Carlisle's Railways* (Lichfield, 1978).

[49] J. J. Gaskin (ed.), *The Vice-Regal Speeches and Addresses, Lectures and Poems of the Late Earl of Carlisle* (Dublin, 1865), p. 229.

[50] Olien, *Morpeth*, pp. 207-11.

The growth of the railway network allowed the lower-middle and working classes to visit country houses on excursions. These particularly appealed to the 'rational recreation' movement, which sought to provide wholesome leisure for working-class town dwellers, whose surroundings were seen to be detrimental to health and morality.[52] Carlisle approved, stating that cheap trips conveyed 'the jaded mechanic and artisan from the smoke of the city to enjoy one weekly gasp of fresh air'.[53] He opened Castle Howard to tours organised by the West Riding's many philanthropic organisations, and was often present to greet these groups personally. In 1862, for instance, he personally welcomed 800 visitors from Bradford, an act much praised in the local press.[54] Such actions laid the foundations for Castle Howard's modern role as a tourist attraction.

Carlisle's major contribution to Yorkshire's railways, however, came through his involvement in the Malton and Driffield Junction Railway Company. This company was founded in October 1845 to construct a line between Malton and Driffield at a proposed cost of £240,000, which was to be raised predominantly through shares. The principal movers were William Copperthwaite, William Allen (agent of Earl Fitzwilliam's Malton estate), Henderson and Carlisle, who headed the board of directors and subscribed £1,600.

The company's formation came during the railway boom in Yorkshire in the mid-1840s led by Hudson, who illicitly subscribed £40,000 of his own company's money to the line. Carlisle and his fellow directors hoped to connect their venture to Hudson's proposed line between Thirsk and Malton, together creating a profitable major trunk route linking Newcastle with Hull. However, the directors also stressed the wider benefits the line would bring for the region, stating that it would reduce the price of coal and open up new agricultural markets.[55] Carlisle's involvement was thus partly an extension of his leadership role in the community. He noted that he never invested 'except where I feel an interest in the district'.[56]

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[51] CH/F5/116, 'Statement of Railway Shares Belonging to the Earl of Carlisle', dated 13 Apr. 1849.

[52] Adrian Tinniswood, *The Polite Tourist: A History of Country House Visiting* (London, 1998), pp. 145-50.

[53] Lord Morpeth's election speech, reported in *Leeds Mercury*, 24 Jan. 1835, p. 6.

[54] CH/F5/3, seventh Earl of Carlisle to John Henderson, 6 Sept. 1850; *Leeds Mercury*, 13 Sept. 1862, p. 5.

[55] Warwick Burton, *The Malton and Driffield Junction Railway* (Halifax, 1997), pp. 5-7.

[56] CH/J19/8/9, Carlisle diary, 3 Nov. 1845.

Work on the line began in 1847. It quickly became apparent that the directors had grossly underestimated the cost and difficulty of the project. The main source of trouble was the line's only tunnel at Burdale, which was plagued by logistical difficulties which ate up capital. In 1848 work was suspended due to lack of funds, while in 1849 the fall of the intemperate Hudson jeopardised the completion of the essential Thirsk–Malton line. The directors had to stump up money to revive this project. All these developments were keenly felt by Carlisle, who was highly involved in the company's meetings. He mournfully recorded that the project was in 'rather a fishy state'.[57] Whilst work resumed in 1850, the problems at the tunnel were overcome only at the cost of making the line single track, thus ending the company's ambitions to found a major route.

The line opened to the public in June 1853, years behind schedule and at a cost in excess of £80,000 above the original estimate. Warwick Burton, an authority on the line, doubts that the company's shareholders ever saw a return on their investment. In 1854, the Malton and Driffield was amalgamated into the new North Eastern railway company. Nevertheless, the line did represent a major change in the local landscape and economy, whilst Burton has suggested that it did provide its promised boon to local agriculture.[58] That it did so owes something to the effort expended by Carlisle. At the ceremonial opening of the line, he recorded feeling 'much emotion, at our seven years of difficulty thus conquered', revealing his significant personal involvement in the project.[59]

'AN END IN EVERYTHING': CARLISLE, RELIGION AND THE ESTATE

Thus far, this article has been primarily concerned with detailing the changes to the economic landscape around Castle Howard. However, it was the moral, social and spiritual condition of his tenantry which most pre-occupied Carlisle as a landowner. As will be seen, this was a direct result of his faith. Like many of the Whigs of his generation, his Christianity was deep and intense, providing, as he put it, a 'motive and an end in everything'.[60] Fortunately, it has been possible to reconstruct his beliefs in some detail by analysing his diaries, correspondence, and a commonplace book of his favourite sermons.

With the exception of the sixth Earl of Carlisle, the seventh Earl's immediate family were all highly religious. His mother Georgiana was a particularly important influence on his faith, being a fervent evangelical who took a keen role in her children's religious education.[61] By adulthood Carlisle had cast off many of these doctrines, particularly the overriding sense of sin which oppressed his mother. However, he remained heavily influenced by the belief, prevalent in evangelical teaching, that faith should influence the Christian at all times. God, he taught, demanded that man should 'constantly be governed by the motives, sustained by the principles, living, breathing, acting in the invisible atmosphere of true religion'.[62]

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[57] CH/J19/8/24, Carlisle diary, 5 Nov. 1850.

[58] Burton, *Malton and Driffield Junction Railway*, pp. 16-24.

[59] CH/J19/8/31, Carlisle diary, 13 Apr. 1853.

[60] Holland House Papers (British Library), Add. MS. 51583, ff. 111-12, Lord Morpeth to Lady Holland, 20 Mar. 1844.

Carlisle believed he had a spiritual duty to be kindly, dutiful, selfless and charitable. He prayed to God to 'fill me with more disinterested zeal to do thy will and work'.[63] These views led him to become one of the most noted philanthropists of the early-Victorian era. He patronised causes such as the Bible Society, the Health of Towns Association and the Society for the Propagation of the Gospel. In politics, too, Carlisle's ideal of unselfishness fitted easily with the Whigs' conception of themselves as the disinterested champions of the people. However, his faith was less compatible with that fashionable metropolitanism which, as noted above, has been identified as central to the Whig ethos.

Although he enjoyed literary talk at Whig salons like Holland House, Carlisle held an ambiguous attitude to the capital, being uncomfortable with its materialistic high society. He joined many evangelical moralists it denouncing London's 'frivolous routine of fashion' as being 'too often mixed with the promptings of selfishness and vanity'.[64] In contrast, his role as a landowner allowed for a more comfortable manifestation of his sense of duty. Like those of other country houses, his Yorkshire estate was governed by a complex moral economy which shaped relations between landlord and tenant.[65]

The estate contained around 400 families and, according to an 1845 survey commissioned by Carlisle, a total population of 2,614 people (a small proportion of these were freeholders, but were nevertheless thought to come within Carlisle's sphere of care). Many of these families possessed little more than a humble cottage, and relied on the Howards for welfare, employment and security.[66] Carlisle continued an established tradition of charity on the estate, granting peppercorn rents to the poor, distributing wood and blankets, and subsidising a number of institutional and individual charities like the Castle Howard coal club.[67]

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[61] Ruth Larsen, 'Dynastic Domesticity', pp. 102-3. In addition, the Castle Howard archives contain a selection of family prayers composed by Georgiana Carlisle which are heavily evangelical in tone (CH/J18/74).

[62] CH/J19/9/15, Commonplace book of sermons belonging to seventh Earl of Carlisle, text entitled 'Your Life is Hid with Christ in God'.

[63] CH/J19/8/10, Carlisle diary, 1 Jan. 1846.

[64] George Howard, seventh Earl of Carlisle, *Lectures and Addresses in Aid of Popular Education* (London, 1852), pp. 81, 84.

[65] Matthew Cragoe, *An Anglican Aristocracy: The Moral Economy of the Landed Estate in Carmarthenshire, 1832–1895* (New York, 1996), pp. 3-4.

[66] CH/F5/30/1, Rent rolls for the Castle Howard estate; F5/98, Cottage Census of the Castle Howard Estate.

However, his actions were probably shaped more by his faith than by tradition. He preached that charity was an indispensable virtue, 'one by which the Christian must often examine himself, and prove his own soul'.[68] Long ago, David Spring suggested that the nineteenth-century religious revival encouraged the aristocracy to take a closer interest in their estates.[69] Carlisle's life seems to support this interpretation; he took a much stronger personal interest in the condition of his tenantry than his father did, even before inheriting the estate. The Revd William Walker of Slingsby could thus write in 1845 that Carlisle and his equally religious sister, Mary, were 'the benevolent promoters of every good object' in the locality.[70]

Walker was a somewhat biased witness, but Carlisle's private papers provide ample evidence for his contention. Illuminating here is a fascinating bundle in the Castle Howard archives entitled 'The Case of Thomas Coates', a labourer born on the estate. Carlisle rescued Coates from the workhouse by giving him a job on the estate, housing him in a nearby village. There had been a closer cottage, but this would have required numerous repairs which Henderson thought too expensive. The ailing Coates died soon after afterwards. Carlisle worried that he might have contributed to this death by making Coates walk further to work than he need have done. When he feared himself to be dying of a fever, the idea that he had placed his own self-interest above his tenant's welfare totally occupied his thought. He wrote that he still had 'scruples' over whether he had 'treated Coates in as considerate a manner as I should wish to treat every one'.

Determined that there should be no similar instances, he set out an extensive statement of the case for the somewhat incredulous Loch, who replied that Carlisle's conduct had been 'unexampled'.[71] Nevertheless, that Carlisle should have worried about this case when he thought he was about to meet his own Maker is highly revealing. Coates was by no means the only labourer to receive Carlisle's personal attention. In 1844, for instance, he read the Bible to a dying shoemaker, returning several times to his cottage.[72] More unusually, he also attempted to cure the illnesses of several of his tenants through mesmerism, a very early form of hypnotism.[73] Whilst this may strike us as eccentric today, Carlisle was among many early-Victorians who were convinced that mesmerism had medical benefits. As Alison Winter has rightly noted, his experiments befitted his role as a benevolent landlord.[74]

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[67] CH/F5/5, Annual Accounts.

[68] CH/J19/9/15, Carlisle's book of sermons, text headed 'In as much as ye did it not unto the least of these, ye did it not unto me'.

[69] David Spring, 'Aristocracy, Social Structure and Religion in the Early-Victorian Period', *Victorian Studies*, 6:3 (1963), 263-80.

[70] Rev. William Walker, *Some Account of the Parish and Village of Slingsby*, p. 20.

[71] CH/F5/118, 'The Case of Thomas Coates'.

[72] CH/J19/8/2, Carlisle diary, 31 Mar., 4 and 29 Apr. 1844.

Carlisle's concern for the poor seems to mark him out as a model Victorian paternal landowner. Paternalism can be seen as a hierarchical, organic view of society in which all members had mutual obligations; landlords would act benevolently towards tenants, who in return would be expected to act deferentially towards their superiors. David Roberts has highlighted a revival of paternalism among the early-Victorian élite, encouraged by increased religious enthusiasm and the popularisation of chivalric ideals.[75] As an ideology, it could be used to justify that greater degree of intrusion into the moral lives of their dependants which distinguished Victorian aristocrats from their eighteenth-century forebears.[76]

Castle Howard was certainly by no means immune from this development. Henderson set about ridding the estate of 'dubious characters' with a certain relish, on one occasion triumphantly recording that he had rid the estate of a 'very base strumpet'.[77] Carlisle, too, was highly concerned about suspected cases of immorality, and could be quite authoritarian in reacting to them. We find that he attempted to 'save' one alcoholic innkeeper by removing him from his inn, discontinued patronage of the popular Castle Howard steeplechase because it encouraged cruelty, stopped providing ale at rent-day dinners, and was outraged to find that one tenant had 'contracted an illegal marriage by highly discreditable means'.[78]

Nevertheless, in so far as paternalism was based around a semi-feudal social vision, Carlisle cannot readily be considered a paternalist. The notion of a past golden age of social deference was incompatible with his Whiggish ideals. Tellingly, he found the Young England group, perhaps the clearest cultural and political expression of early-Victorian paternalism, to have 'too much of Old England for me'.[79] He aimed, instead, to encourage the independence of his tenantry, part of a wider project – or set of projects – which sought to stimulate their moral and social improvement. This was, of course, still an intrusive and presumptive course of action, but it was forward rather than backward looking, an attempt to encourage social progress.

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[73] CH/J19/8/8, Carlisle diary, 3 July and 11 Aug. 1845.

[74] Alison Winter, *Mesmerized: Powers of Mind in Victorian Britain* (London, 1998), pp. 147-8.

[75] David Roberts, *Paternalism in Early Victorian England* (London, 1979), pp. 2-10.

[76] Jessica Gerard, *Country House Life: Family and Servants, 1815–1914* (Oxford, 1994), pp. 242-6.

[77] CH/F5/2/3, John Henderson to Mr Lewis, 17 Nov. 1836.

[78] CH/J19/8, Carlisle diary, 17 Apr. 1845, 10 Sept. 1846, 20 Apr. 1858; CH/F5/3, Lord Morpeth to John Henderson, 16 Mar. 1843; seventh Earl of Carlisle to John Henderson 22 Dec. [arranged with 1849 letters].

[79] Carlisle, *Lectures and Addresses*, p. 79.

One aspect discouraging Carlisle from a paternalist viewpoint was his agreement with that element in Victorian thought which prized self-reliance and industriousness. In this view, indiscriminate charity might produce a dependency culture which was morally demeaning to both donor and recipient. These ideas found their greatest political expression in the Whigs' New Poor Law of 1834. Although it never fully operated in practice, the Law sought to restrict poor relief by confining it to workhouses, where conditions were made deliberately worse than those outside. The Law arose out of concerns that the previous system of outdoor relief had encouraged dependency among the able-bodied poor and artificially inflated poor rates.

The intellectual origins of the New Poor Law owed much to a Christian political economy, loosely associated with the liberal wing of the Tory party, which saw the old system of poor relief as an impediment to a natural, punitive and largely static providential order. However, in so far as it sought to transform the character of the rural population, the Law was also entirely compatible with the Whigs' progressive values.[80] There is little evidence to suggest that Carlisle was seriously influenced by political economy, but he did lend support to the system embodied in the Law. As Irish Secretary, he was one of the chief movers behind the Irish Poor Law of 1838, which introduced the new English system of workhouses into Ireland.[81] When the English New Poor Law was attacked by radicals in Yorkshire, Carlisle defended it as a means of 'bettering the condition of the labouring classes', arguing that it would promote self-reliance and give encouragement to industriousness and honesty.[82]

As Chairman of the Malton Board of Guardians in the 1840s, he was responsible for administering the poor laws in the Castle Howard district. He was extremely active in this role; in October and November 1843 alone, he attended four meetings and toured the local workhouse.[83] The minutes of the Malton Union do not seem to have survived, but Carlisle's private papers suggest that his thought and actions accorded with the intentions of the 1834 legislation. While the Malton Union continued to give outdoor relief to the infirm, he proudly noted that there were few able-bodied claimants in the locality.[84]

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[80] Boyd Hilton, *The Age of Atonement: The Influence of Evangelicalism on Social and Economic Thought, 1785–1865* (Oxford, 1988), pp. 241-6.

[81] Peter Gray, *The Making of the Irish Poor Law, 1815–1843* (Manchester, 2009), *passim*.

[82] *Bradford Observer*, 8 Jan. 1835, p. 2.

[83] CH/J19/8/1, Carlisle diary, 14, 28 and 31 Oct., 11 and 25 Nov. 1843.

[84] CH/J19/8/3, Carlisle diary, 27 Apr. 1844.

However, Carlisle's attempts to reform the character and improve the condition of the estate population were predominantly far more benign than this example suggests. The main impulse behind his actions came from the other major element in his religion, the Incarnation. As Boyd Hilton has rightly noted in an illuminating article, the idea of the Incarnation – the belief that Christ was a being both human and divine – dominated his religious thought. Unlike those evangelicals who focused on Christ's death and the doctrine of Atonement, Carlisle's faith emphasised Christ's life, which be believed provided a pattern of (literally) godly conduct around which he based his actions. Importantly, moreover, by uniting man and God, the Incarnation showed that mankind could be godly.[85] As David Bebbington has recently suggested for Gladstone, the Incarnation accordingly gave Carlisle a highly optimistic view of human potential.[86]

Carlisle accordingly saw a close connection between human progress and the promotion of Christian values, typical of many Whig-liberals of his era. In both politics and philanthropy, he sought to encourage the God-given qualities of his fellow-men, helping to extend their capacities and raising them, as he put it, 'above their range of sordid cares and low desires'.[87] In practical terms, he believed that almost all problems might be solved with the application of a little Christian 'active virtue'. There was, he claimed, 'scarcely anything that might not be attained', if it could only be felt that 'each one has his own appointed work … to aid to the general welfare and advancement of his species'.[88]

Hilton has illustrated how Carlisle's Incarnationalist views shaped his actions as a social reformer, encouraging his involvement in issues such as education and public health. Richard Brent, arguing from a slightly different perspective, has further detailed how Carlisle was one of a number of Whig politicians who were spiritually inspired to encourage moral progress through schemes of education and church reform.[89] Yet the religious origin of his beliefs ensured that these ideals shaped all spheres of his life, including his role as a landowner. His actions on the Castle Howard estate were thus closely related to his activities as a politician. Both focused heavily on elevating the moral, social and spiritual character of mankind.

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[85] Boyd Hilton, 'Whiggery, religion and social reform: the case of Lord Morpeth', *Historical Journal*, 37 (1994), 829-59. This idea is also a prevalent theme in Carlisle's commonplace book of sermons (CH/J19/9/15), which was not consulted by Hilton.

[86] For Gladstone and the Incarnation, see David Bebbington, *The Mind of Gladstone: Religion, Homer, Politics* (Oxford, 2004), pp. 90-6, 134-8.

[87] Carlisle, *Lectures and Addresses*, p. 113.

[88] Carlisle, *Lectures and Addresses*, pp. 79-80.

[89] Hilton, 'Whiggery', 852-9; Brent, *Liberal Anglican Politics*, pp. 52-63.

IMPROVING THE ESTATE – MORALITY AND SOCIAL CONDITION

One of the first projects which Carlisle set up on the estate was the provision of allotments. These were introduced at Bulmer, Slingsby, Terrington and Coneysthorpe in 1832. Estate correspondence suggests that this was done largely at Carlisle's instigation, despite the fact that the sixth Earl was still very much involved in the estate at that time.[90] Allotment provision in England expanded dramatically in the early 1830s due to the efforts of the Labourer's Friend Society (LFS). The LFS aimed to encourage landlords to provide allotments, arguing that this would reduce rural social tension and encourage sobriety, independence and self-reliance. As Jeremy Burchardt has detailed, although it was non-partisan, its progressive ethos appealed to liberal landlords. It received support from Whigs such as the Duke of Bedford, Viscount Ebrington and, critically, Carlisle, who was one of its most politically important patrons in the 1830s.[91]

At an LFS meeting in 1834, he dwelt on the 'striking' contrast between those labourers who had allotments and those who had not. 'The one class', he opined, 'went to the public house, deserting for the time their wife and children … the others could be seen with a spade in their hands, busily employed in making comfortable provision for their wives and families'.[92] In this light, the introduction of allotments at Castle Howard can be seen as an attempt to encourage the moral progress of the local population. Henderson certainly hoped that they were having this effect, stating that they had encouraged the industry of tenants as well as adding to their comfort.[93]

However, as might be expected given his own religiosity, the major way in which Carlisle attempted to improve the morality of the estate was through religion. He believed that spreading the Christian message was one of his most important religious duties; those who claimed to have the 'true spirit of a Christian', he taught, had to extend 'religious knowledge' to fight against sinfulness.[94] For Carlisle, the basis of all Christian knowledge was the Bible, which he considered the 'best counsel in every condition and in every circumstance of life'.[95] In 1843 he undertook a project to distribute Bibles on the estate, ascertaining which families were without access to a Bible and providing them with one at his own expense.[96]

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[90] CH/F5/2/2, John Henderson to Lord Morpeth, 4 Jan. 1832.

[91] Jeremy Burchardt, *The Allotment Movement in England, 1793–1873* (Woodbridge, 2002), pp. 74-94.

[92] Speech of Lord Morpeth at a meeting of the Labourer's Friend Society, reported in *Morning Chronicle*, 20 Mar. 1834, p. 4.

[93] CH/J19/1/6/22, John Henderson to Lord Morpeth, not dated.

[94] CH/J19/9/15, Carlisle's book of sermons, 'In as much as ye did it not unto one of the least of these, ye did it not unto Me'.

[95] Carlisle's speech at the British and Foreign Bible Society, Selby, reported in *Leeds Mercury*, 27 Nov. 1858, p. 5.

Churches also played an important role in Carlisle's evangelism. The Howards possessed the livings of Slingsby and Hovingham, and Carlisle frequently attended services in the local churches. The spectacle of the Victorian landlord checking up on his tenants from the front pew of the village church is almost a cliché, so it is worth emphasising that these were genuine acts of worship, expressing real and deep-seated convictions. Thus, on attending a missionary meeting in Coneysthorpe, he recorded that 'when the hymn rose from that very English rural green it was impossible not to feel much emotion. May I be more led to know what things one ought to live for'.[97] Nevertheless, by attending services, Carlisle could check up on the likely success of the preaching. He was particularly vexed by Revd Charles Hodgson, the clergyman at Coneysthorpe, whose sermons he felt to be 'very calvinistic'. He once despaired when Hodgson delivered a sermon attacking Puseyite essayists, whom, he noted, could 'hardly be known to the grey-fathers and young labourers' in the congregation.[98]

More significantly in terms of the landscape of his estates, Carlisle also sought to increase the spiritual opportunities of his tenants by building new churches. He contributed to the church of St. James the Great at Morpeth, begun in 1844 by his brother-in-law, the Revd Francis Grey, whilst also funding the church of St. John the Evangelist at Welburn, which was begun in 1859 and dedicated to the memory of his mother. His speech on laying the foundation stone of the former church gives an insight into his motives. He hoped that the church would bring 'all the constraining influences of the sanctuary into the wider commerce of actual life' and lead its community in 'growing fitness for the Kingdom of God and his Christ'.[99]

However, in common with their fellow Yorkshire Whigs, the Earls Fitzwilliam, the Howards were happy to encourage Nonconformity on their estates.[100] The family had a strong tradition of political support for religious tolerance, and this showed in their dealings with local dissent. The sixth Earl, for instance, gave the vibrant local Methodist population a piece of ground to build a chapel at Slingsby.[101] The seventh Earl continued this tradition. He was one of a group of 'Liberal Anglican' Whigs who, while protective of Established Church, were also convinced that the differences between Christian sects were insignificant.[102]

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[96] CH/J19/17, 'Distribution of Bibles on the estates by Lord Morpeth, 1843'.

[97] CH/J19/8/29, Carlisle diary, 29 July 1852.

[98] CH/J19/8, Carlisle diary, 27 Apr 1845, 10 Sept. 1854, 7 Nov. 1858. Coneysthorpe church, built in 1835, was a chapel in the parish of Barton le Street which, when Hodgson was appointed rector there in 1838, was in the patronage of Lady William Gordon of Temple Newsam.

[99] Speech reported in *Morning Chronicle*, 30 July 1844, p. 5.

[100] For Fitzwilliam's tolerance of Nonconformity, see D. J. Gratton, 'Paternalism, Patronage and Estate Management: the fifth Earl Fitzwilliam, 1786–1857' (PhD Thesis, Sheffield University, 1999), p. 52, 96-7.

As he expressed in Parliament, he would 'rather see all men agree under the general denomination of the Christians ... they were too apt to attach to certain principles, doctrines and habits the idea of Protestantism ... and to overlook the more comprehensive scheme of Christianity'.[103] The impact of these views on the estate could be controversial. Carlisle happily gave £10 to a local Catholic priest to convert one of his buildings in Coneysthorpe into a mass house. Throughout his career Carlisle championed the rights of Catholics (making his maiden speech in support of Catholic Emancipation) and it was fitting that he should be so tolerant on his own estate. However, his actions outraged the unfortunate Mr Hodgson, who accused him of encouraging 'the very masterpiece of Satan'.[104]

The moral, intellectual and spiritual improvement of the Castle Howard estate population was further encouraged by Carlisle through education. The estate contained a number of day and Sunday schools controlled or financed by the Howard family. Carlisle gave these schools his full attention, noting down comments about attendance and the quality of teaching. Indeed, he regarded schooling as one of his key duties. After a bout of illness in 1849, he worried that he had 'not been as active as I ought about schools and management of that sort'.[105] Outside the estate, he was a renowned patron of education for the lower orders. In Ireland he was an influential proponent of the Irish national system of education. In England he supported state grants to the British and Foreign School Society and the National Society for Promoting the Education of the Poor in the Principles of the Established Church, supporting both these bodies in a private capacity.[106]

The Whigs in general were enthusiastic about education, believing this to be vital to social progress.[107] Carlisle was the author of a collection of speeches which argued that popular education would enrich the mind and lead to a more 'virtuous people'.[108] However, his passion for education was also inherently bound up with his faith. Elementary education in Victorian Britain was inseparable from religion, with children instructed in morality and the catechism alongside reading and writing. Carlisle placed 'much importance' on co-operation between the clergy and the schools on his estates.[109] Significantly, his papers relating to the distribution of Bibles in the Castle Howard villages include a table detailing the schooling and literacy rates of local families. For a man of Carlisle's piety, education would have been considered important for the way it helped the poor to access the Gospel. Given his incarnationalist views on mankind's potential, Carlisle believed that education had a further holy sanction. 'God', he claimed 'cannot but approve of every creature that He has made developing to the utmost extent of his faculties'.[110]

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[101] CH/F6/1, John Henderson to James Loch, 28 Feb. 1837.

[102] Brent, *Liberal Anglican Politics*, pp. 108-10, 132-8.

[103] Lord Morpeth's speech in the House of Commons, reported in *The Times*, 1 Feb. 1840, pp. 2-3.

[104] CH/J19/8/2, Carlisle diary, 1 and 7 Mar 1844; CH/J19/1/37/51, Rev. C. Hodgson to Lord Morpeth, 7 Mar. 1844.

[105] CH/J19/8/21, Carlisle diary, 12 Sept. 1849.

[106] J. J. Gaskin (ed.), *The Vice-Regal Speeches and Addresses, Lectures and Poems of the Late Earl of Carlisle* (Dublin, 1865), xxix-xxx; Mandler, *Aristocratic Government*, pp. 182-5.

[107] Brent, *Liberal Anglican Politics*, ch. 6.

[108] Carlisle, *Lectures and Addresses*, pp. 91-5.

Interestingly, Carlisle's faith meant that he was a far keener patron of education on his estates than his secular father, who once turned down an application to contribute to a local Sunday School, stating that he did 'not much approve of them'. Long before he inherited from his father it was Carlisle, rather than the sixth Earl, who helped the construction of new schools at Welburn and in Cumberland.[111] Educational facilities were expanded still further upon his succession to the estates. The Castle Howard accounts indicate that the amount spent on the estate schools went from £50 19s. 0d. in 1830 to £128 in 1855. In the mid-1850s Carlisle paid an additional £118 for a new school for boys at Slingsby, of which he declared himself 'very pleased'.[112] A large number of children benefited from his patronage, with Carlisle paying for a number of the poorest to have a free education.[113]

Given their influence over their students, teachers were thought by many early Victorians to play a vital role in the moral aims of education. Unfortunately, they suffered from a very poor contemporary reputation. Low status and poor salaries put off good-quality candidates from entering the profession.[114] Carlisle was one of many reformers who wished to raise the quality and status of the teaching profession. There was, he stated, 'no class in society, be they nobles, or statesmen, or legislators', who had a 'more direct influence for good'.[115] He was a major patron of James Kay's teacher-training college at Battersea, subscribing a massive £500, and (as noted above) an active governor of the diocesan teacher-training college at York, which he used to fill vacancies on the estate.[116]

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[109] CH/F5/3, seventh Earl of Carlisle to John Henderson, 21 Jan. 1850.

[110] CH/J19/17, 'Distribution of Bibles on the estates'; Carlisle, *Lectures and Addresses*, p. 124.

[111] CH/F6/3, sixth Earl of Carlisle to James Loch, 7 Jan. 1827; CH/J19/1/15/106, Georgiana Carlisle to Lord Morpeth, 2 Oct. 1837; CH/F6/3, James Loch to sixth Earl of Carlisle, 1 May 1841.

[112] CH/F5/5, Castle Howard Annual Accounts; J19/8/33, Carlisle diary, 16 Nov. 1855.

[113] CH/L1, Castle Howard School papers.

[114] Pamela Horn, *Education in Rural England, 1800–1914* (Dublin, 1978), pp. 18-23.

[115] CH/J19/1/63/93, handwritten text of Carlisle's speech at an examination of school-masters, dated Mar. 1856.

[116] James Kay-Shuttleworth Papers (John Rylands Library, University of Manchester), Letter 232, Lord Morpeth to James Kay, 6 Sept. 1841; CH/J19/8/35, Carlisle diary, 2 Dec. 1857.

In April 1847, he sought to increase the status of the teachers in the estate villages by increasing their salary, instructing Henderson that 'our Schoolmasters should be put upon a respectable footing. I think as a minimum every Master ought to have £50'.[117] This decision had interesting connections with his political activities. In February the Whig Government had announced controversial plans to establish a national system of apprentice teachers, increase aid to training colleges and raise the salaries of qualified teachers.[118] Carlisle was a member of the Privy Council Committee which drew up these plans. He forthrightly defended them in speeches in both Yorkshire and Parliament in April, arguing that there was a need for better-paid and trained masters.[119] It therefore seems likely that there was a connection between this policy and his actions on the estate.

Carlisle also strongly encouraged education for working men. As a philanthropist, he was a strong supporter of Yorkshire's mechanics' institutes, for which he gave a number of speeches and lectures. In 1852, he lent his support to the new Castle Howard United Villages Itinerating Library, a circulating library inspired by a similar system established by the Yorkshire Union of Mechanics' Institutes. Carlisle provided money and books, leaving the organisation to an effervescent preacher with the extraordinary name of Ishmael Fish, who had been a missionary among the navvies of the Malton and Driffield railway. The library was clearly intended as a project of moral improvement. The *Leeds Mercury* reported that all the books were of a 'useful and instructive kind', with 'immoral' works banned.[120]

Subscribers could enjoy moralistic novels such as Mary Brunton's *Self Control* and Catherine Sedgwick's *The Rich Poor Man and Poor Rich Man*, a volume of *Working Men's Essays on the Sabbath*, the works of Austen and Dickens, and practical books on agriculture. Fish optimistically reported that the library was having a beneficial effect on the 'manners and morals' and 'habits of the village populace'.[121] He dedicated himself to his task, stating that he hoped to 'exhaust' himself in 'the earnest advocacy of all matters relating to the people's advancement and elevation'. Unsurprisingly, Carlisle was drawn to the missionary, claiming to like him 'almost better than anybody' for the way he was 'full of heart and hope'.[122]

[117] CH/F5/3, Lord Morpeth to John Henderson, 12 Apr. 1847.

[118] Denis Paz, *The Politics of Working-Class Education in Britain, 1830–1850* (Manchester, 1980), pp. 126-36.

[119] Hansard, *Parliamentary Debates* (Third Series), HC, XCI, 20 Apr. 1847, cc. 1080-1088; Speech of Lord Morpeth at a meeting of the York Yeoman School, reported in *The Times*, 10 Apr. 1847, p. 5.

[120] *Report of the Yorkshire Union of Mechanics' Institutes, Read at the Sixteenth Annual Meeting, Held in Thirsk, May 18th 1853* (Leeds, 1853), pp. 12-3, 26-8; *Leeds Mercury*, 21 Mar. 1853, p. 10.

[121] CH/J19/1/53/31, Ishmael Fish to seventh Earl of Carlisle, 15 Mar. 1853; CH/J19/1/60/36, Ishmael Fish to seventh Earl of Carlisle, 11 Aug. 1854.

[122] CH/J19/1/51/95, Ishmael Fish to seventh Earl of Carlisle, 16 Oct 1852; CH/J19/1/34, Carlisle diary, 18 Nov. 1856.

Carlisle chose Fish to be the superintendent of another estate project which aimed at moral reform: the Castle Howard Juvenile Reformatory. The Reformatory was established in 1855 in the context of rising concerns about juvenile crime in populous towns, part of wider worries about the baneful moral influence of the urban environment. Contemporaries worried that children were being sucked into a licentious, dissipated and criminal lifestyle as a result of their residence in godless and hedonistic large towns. It was further argued that the justice system exacerbated this problem by sending adolescents to jail alongside hardened adult criminals who taught them bad habits.[123] Responding to these concerns, the 1854 Reformatory Schools Act gave magistrates permission to send young criminals under the age of sixteen to private reformatories after a prison term of fourteen days. The Castle Howard Reformatory was one of sixty-one private reformatories established in England and Wales between the passing of this Act and 1871.[124]

Like the majority of these institutions, the Castle Howard Reformatory was founded by the landed elite as an extension of their role in the magistracy. Its origin can be traced to the North and East Riding Quarter Sessions of July 1855, at which concerns about the rising juvenile crime rate in Yorkshire's towns were expressed. A Society for the Reformation of Juvenile Offenders in the North and East Ridings of Yorkshire was soon established, with Carlisle as President and William Harcourt, the dynamic son of the former Archbishop of York, Edward Harcourt, a driving force. At its inaugural meeting in October, the Society recommended the formation of an institution for boys which would offer moral and religious instruction and vocational training. Carlisle offered a plot of land east of Welburn, stating that the inmates could train in agriculture on an attached farm.

Carlisle's proposal was eagerly accepted by the Society, which was keen for the inmates to be placed in 'country situations' upon release, thus removing them from pernicious urban influences.[125] A purpose-built building was opened in late 1856, after Fish and his charges had temporarily occupied a different dwelling. As superintendent, it was Fish's job to provide moral and spiritual guidance to the boys. He sought to teach 'moral discipline ... self-control ... self-denial ... ready obedience ... steady application' and 'fear of God', believing that the boys' problems stemmed from the fact that they were 'estranged from God in heart'.[126] Despite this earnestness, the Reformatory caused friction on the estate, being charged with two cases of poaching by the estate staff. These accusations led to threats of resignation on both sides, and the Earl had to intervene to restore harmony to his pet project.[127]

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[123] Martin Weiner, *Reconstructing the Criminal: Culture, Law and Policy in England, 1830–1914* (Cambridge, 1990), pp. 14-26, 131-41; Margaret May, 'Innocence and Experience: The Evolution of the Concept of Juvenile Delinquency in the Mid-Nineteenth-Century', *Victorian Studies*, 17:1 (1973), 7-29.

[124] John Stack, 'The Provision of Reformatory Schools, the Landed Class, and the Myth of the Superiority of Rural Life in Mid-Victorian England', *History of Education*, 8:1 (1979), 33-43.

[125] *Report of a Committee Appointed to Recommend a Plan of Reformatory Schools for the North and East Ridings of the County of York* (York, 1855).

[126] *Report of the Committee of the Society for the Reformation of Juvenile Offenders for the North and East Ridings of Yorkshire, 1856* (York, 1857), p. 17.

Such setbacks aside, the Reformatory provided a perfect outlet for Carlisle's enthusiasm for moral and social reform. He considered it to be 'one of the chief attractions' of Castle Howard.[128] In both his private and public capacities, he had long been interested in prison reform. In 1848 he chaired a meeting of the Philanthropic Society, which established a juvenile reformatory to teach gardening and farm labour at Redhill in Surrey.[129] This institution was clearly a major influence on the men who founded the Castle Howard Reformatory.[130] The Reformatory was also connected to Carlisle's role as Lord Lieutenant of Ireland, through which he patronised the work of the Irish prison reformer Walter Crofton.

Crofton sought to stimulate the good qualities of prisoners by progressively rewarding them for good behaviour. The key to his system was that each prisoner was treated with kindness and respect as an individual with peculiar circumstances. A similar philosophy was in place at the Castle Howard Reformatory. In a speech to the Social Science Association in 1858, Carlisle made an explicit link between the two organisations. He argued that both Crofton's system and the Reformatory showed that the reformation of criminals depended on what he called 'individualising' the prisoners, making them 'the subject upon whom influence, argument, advice and sympathy are brought to bear'.[131] By 1888 over five hundred boys had passed through this particular brand of care at Castle Howard.[132]

In addition to the morality of his tenants, Carlisle also had a strong interest in improving their social condition, particularly through health and housing. He charged his staff with improving sanitation throughout his property. Reflecting on this development, Henderson traced it to 1845, when Carlisle had 'taken a greater interest … in the social condition of the resident population, than he had previously done'. When he inherited the estate in 1848, he reiterated that 'ingenious steps should be taken for the sanitary condition of the villages'.[133] He often took tours of the estate, noting down those areas which called for sanitary improvement. Towering over these activities was his concern about the risk of fever.

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[127] CH/L6/5, Reformatory Papers.

[128] CH/J19/9/13, text of lecture by Carlisle on reformatory schools, 1858.

[129] *Morning Chronicle*, 28 Feb. 1848, p. 3.

[130] Edward William Harcourt, ed., *The Harcourt Papers: vol. XIV: Memoir of William Harcourt* (printed for private circulation, 1905), p. 207.

[131] CH/J19/9/13, lecture on reformatory schools, 1858. For an account of Crofton's system, see Lawrence Goldman, *Science, Reform and Politics in Victorian Britain: The Social Science Association* (Cambridge, 2002), pp. 155-9.

[132] T. Bulmer, *History, Topography and Directory of North Yorkshire* (Preston, 1890), p. 656.

Indeed, Carlisle's conscience may have been pricked by the case of Richard Spruce (father of the botanist), a schoolmaster on the estate who lost three of his children to scarlet fever. Spruce asked for a healthier cottage, indirectly laying the blame for the deaths at the Howards' door. Carlisle noted this case in his diary, and it is possible that it influenced his conduct.[134] Certainly thereafter he was anxious to do all he could to avoid similar incidents, noting that he would see it as a 'personal discredit ever to hear of fever' in the villages. He encouraged his tenantry to vaccinate themselves against smallpox, instructing Henderson to put pressure on a family who refused. He also sent Henderson a list of regulations to follow to avoid typhus, taking some inspiration from the 'peerless' sanitary improvements conducted by the Norcliffe family at nearby Langton, a village much admired by the Howards for its healthy reputation.[135]

This project of sanitary improvement on the estate had three main elements. The first was the removal of offensive smells or 'miasmas' which were thought by some early-Victorian sanitary reformers, including Carlisle, to encourage disease. In 1854, for instance, Carlisle drew Henderson's attention to a set of 'wretched houses' at Terrington, where the 'smells from the Privy are very offensive'.[136] His attention had been drawn to the importance of removing such nuisances through his membership of the Health of Towns Association and later by his legislative involvement in public health. In 1846, partly in response to the threat of cholera, he passed the Public Nuisance Removal Act, which empowered local authorities to remove nuisances on the testimony of two medical officers.[137]

Having carried the Act, Carlisle was responsible for administering it in the Castle Howard area through his role in local government. He ordered the formation of local 'nuisance' committees in 1848. His papers also include an 1853 list of nuisances at Slingsby reported by a local doctor, suggesting this was related to the requirement of the Act. The list indicates that the nuisances were subsequently removed, possibly by the estate staff.[138] The second aspect of sanitary improvement was the provision of a healthier water supply. Carlisle was particularly concerned that Terrington's water came from an 'unwholesome pond', and insisted that this be replaced with a well or 'humble fountain'.[139] Finally, he also concentrated on improving the estate's housing. Whilst repairs to cottages had been a common feature of estate practice, Carlisle was the first owner to apply a regular sum to such improvements.[140]

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[133] CH/F5/98, John Henderson to James Loch, 27 July 1854; CH/F6/1, seventh Earl of Carlisle to James Loch, 7 Nov. 1848.

[134] CH/F5/1, Richard Spruce to sixth Earl of Carlisle, 13 Apr 1845; CH/J19/8/7, Diary of Lord Morpeth, 2 Apr. 1845.

[135] CH/F5/3, Lord Morpeth to John Henderson, 29 Sept. 1847, 3 Nov. 1848, 17 Oct. 1854; CH/J19/8/21, Carlisle diary, 28 May 1849.

[136] CH/F5/98, Cottage Census.

[137] House of Commons, *Parliamentary Papers*, A Bill for the more speedy Removal of certain Nuisances, and to enable the Privy Council to make Regulations for the Prevention of Contagious and Epidemic Diseases, 1846 (393), I.393.

Importantly, Carlisle also instigated a major cottage building project, replacing dilapidated dwellings, which started in the 1840s and was continued into the 1870s by his brother Admiral Edward Howard, who ran the estate in trust on account of the mental infirmity of Carlisle's brother and heir, William, the eighth Earl.[141] This project is partly responsible for the current appearance of the Castle Howard villages. There was an established link in contemporary thought between the size and condition of cottages and the health of their inhabitants. Unhealthy and overcrowded cottages were also thought to encourage immoral behaviour, by forcing siblings of different sexes to sleep together; Victorian moralists were almost obsessed by this, believing it to be a major source of promiscuity and prostitution. They were also worried that overcrowding promoted intemperance by increasing the incentive to leave the filthy cottage for the ale house.[142]

The estate cottage-building project was started with these concerns in mind. New houses in Slingsby, for instance, were built to offer 'an abundance of space for conveniences', replacing cottages which were 'much too crowded'.[143] Interestingly, both the moral and medical benefits of cottage improvement were illustrated in Edwin Chadwick's famous 1842 *Report on the Sanitary Condition of the Labouring Population of Great Britain*.[144] Chadwick was a close associate of Carlisle and became his subordinate at the General Board of Health, and he was certainly deeply impressed by his work. Although there is no direct evidence to suggest that Chadwick influenced the cottage building project at Castle Howard, Carlisle did consult him when building new houses at Morpeth in 1849.[145]

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[138] CH/F5/3, seventh Earl of Carlisle to John Henderson, 3 Nov. 1848; CH/C28/10, paper headed 'Nuisances Reported by Dr Borton'.

[139] CH/F5/98, Remarks in Carlisle's hand on the cottages at Terrington.

[140] CH/F5/3, seventh Earl of Carlisle to John Henderson, 8 Nov. 1854.

[141] CH/F5/81, Cottage Building Papers.

[142] John Burnett, *A Social History of Housing, 1815–1895*, 2nd edition (London, 1986), pp. 30-53.

[143] CH/ F5/98, Cottage Census.

[144] Edwin Chadwick, *Report on the Sanitary Condition of the Labouring Population of Great Britai*n, edited and with an introduction by M. W. Flinn (Edinburgh, 1965), pp. 323-4.

[145] Chadwick Papers (University College London, Special Collections), 1055, V, f. 578, seventh Earl of Carlisle to Edwin Chadwick, 9 Apr. 1849.

It is significant that many of the improvements in sanitation on the estate were instigated between 1845 and 1850, the same period in which Carlisle's political engagement with public health was most intense. Rosemary Hayden has traced improvements in health and housing on Lord Palmerston's Broadlands estate to an impulse generated by his growing interest in public health, and it seems likely that the same thing happened at Castle Howard.[146] On this topic, one further area of interest is the use made by Carlisle of new methodologies of social investigation. The public health campaign made extensive use of the new science of statistics and surveys. Carlisle applied these techniques to his estate. In 1845 he ordered an extensive survey of the Castle Howard villages which recorded the state of cottages, the condition of tenants and statistics on the size of families and their access to land. This survey was repeated in 1854 as part of a regular cycle, and directly informed Carlisle's plans for the estate.[147]

CONCLUSION

In summary, the seventh Earl of Carlisle implemented a number of changes on the Castle Howard estate. Those changes were part of a spiritually-inspired project to improve the moral, social, economic and spiritual condition of his estate and its population. His actions had close ties to his interests as a politician, challenging the notion that early-Victorian Whiggery was a predominantly metropolitan phenomenon.

The connection between politics, religion and landownership traced in this article might well be expected. The Victorian aristocracy were, after all, Britain's political as well as its economic élite. The country homes of the aristocracy were, in Mark Girouard's seminal phrase, 'power houses' which both expressed and added to the power of their owners.[148] In various ways, land remained vital to political power until the last quarter of the nineteenth-century.[149]

Moreover, issues such as the corn laws, tithes and the land question in Ireland – what might be called the politics of land – dominated the concerns of the (primarily aristocratic) legislature. Of course, votes on these questions did not simply reflect a landowner's economic self-interest. Aristocrats prided themselves on their disinterested behaviour, while political, cultural and religious differences within the aristocracy mattered greatly. Despite this, however, historians have proved reluctant to incorporate such differences into accounts of the aristocracy's country estates. It is commonly assumed that the actions of patricians in the rural sphere reflected their position as landowners. In this view, their motivations arose from the traditional obligations of property, and their actions were primarily designed to foster and defend the rural social hierarchy upon which aristocratic power ultimately depended.[150]

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[146] Rosemary Hayden, 'Health and Housing: Lord Palmerston as Hampshire Proprietor, c.1807–1865', *Proceedings of the Hampshire Field Club and Archaeological Society*, 58 (2003), 254-67.

[147] CH/F5/98, Cottage Census.

[148] Mark Girouard, *Life in the English Country House: A Social and Architectural History* (London, 1978), pp. 1-5.

[149] David Cannadine, *The Decline and Fall of the British Aristocracy* (London, 1990), pp. 9-19.

These factors were undeniably important. Yet this interpretation collapses the distinctions within the aristocracy, ignoring their potential influence. Of course, any crude attempt to establish a 'Whig' or 'Tory' approach to estate management is likely to flounder on the significant divisions within these groups, if nothing else. Yet it is arguably the case that Tory patricians (particularly Ultra Tories) were probably more sympathetic to a paternalistic and static approach to landownership than Whig aristocrats, who were more likely to occupy distinctive positions on issues such as religious tolerance, the need for moral progress and the importance of science. At Castle Howard, those values merged with the seventh Earl of Carlisle's religious beliefs, operating alongside ideas about the obligations of land to produce estate improvements which had a significant impact. This article has hence situated the development of the Castle Howard estate within the wider cultural, political, religious and intellectual world in which its owner moved and lived. It indicates the need for a closer interrogation of the role of these factors in the wider history of the county house.

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[150] See, for instance, John Vincent Beckett, *The Aristocracy in England, 1660–1914* (Oxford, 1986), pp. 325-52; Kim Reynolds, *Aristocratic Women and Political Society in Victorian Britain* (Oxford, 1998), p. 28; Cragoe, *An Anglican Aristocracy*, pp. 93-110, 129-41.

BISHOP WILLIAM STUBBS AND KNARESBOROUGH

By Richard M. Koch

William Stubbs (1825–1901), pioneering medieval historian, academic, Regius Professor at Oxford, clergyman and later bishop of Chester and then Oxford, was born in Knaresborough and, despite living most of his adult life outside the county, he remained true to his Yorkshire roots. This article shows how his Knaresborough background shaped him as a historian. His first encounter with medieval history was in the archives at Knaresborough Castle; his schooling in Knaresborough and Ripon, and the support he received from the Diocese of Ripon enabled him to rise from poverty to a scholarship at Christ Church, Oxford; and his interests and view of English history continued to reflect his early experiences in Knaresborough, the historic past of the town and his own family's roots in the area over at least sixteen generations. Stubbs subscribed to the Thoresby Society and was a critical friend of the Yorkshire Archaeological Society. His legacy as a great editor of medieval manuscripts has been maintained through successive generations of scholars, not least at the University of Leeds through the work of the late John Taylor.

William Stubbs, the future constitutional and ecclesiastical historian, clergyman, Bishop of Chester and then of Oxford, was born on 21 June 1825. To-day, the house where he was born and brought up stands empty and forlorn on Knaresborough High Street, above Berry's Passage. In Stubbs's day there was a long garden behind the house, a remnant of its origins as a medieval plot. Burgesses once had their houses close to the Castle and the market, while the more servile members of society lived towards Bond End.[1] In 1975, Knaresborough Town Council installed a plaque outside the house to commemorate the birthplace of one of its most distinguished sons. Sir James Stubbs (1910–2000), the Bishop's great-grandson, wrote a letter to the Town Clerk thanking him for this honour, in which he noted that 'to the end' William Stubbs had been a very loyal son both to Knaresborough and to Yorkshire.[2] Stubbs spent only his childhood and youth in Knaresborough, but these were the most formative years of his life, serving as an inspiration to his work both as a historian and a clergyman. During the last decade of his life, Bishop Stubbs did not physically return to Knaresborough, but he did reflect back on the history of the town, its great personages, and his family's associations with them both. Stubbs was once described as a 'Yorkshire oak' and, like that oak, his family's roots in the region were both broad and deep.

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[1] George Sheeran, *Medieval Yorkshire Towns: People, Buildings and Spaces* (Edinburgh, 1998), p. 41.

[2] Stubbs Family Papers (in private hands), Sir James Stubbs to the Town Clerk of Knaresborough, 2 June 1975.

Despite being a prolific writer, Bishop Stubbs never wrote a memoir, so our knowledge of his early life is somewhat sparse. We know little of Stubbs's father, William Morley Stubbs (1800–1842), beyond the fact that he was a lawyer, one of ten attorneys in the town, and that several of his forebears were 'quite poor' and came from Hampsthwaite.[3] From his father Stubbs inherited a legal, judicious mind and a fine cursive script along with a gift for writing verses. Among the Stubbs family papers there is a two-page poem dedicated to his fiancée. William was the eldest of six children and very close to his mother, Mary Anne Stubbs *née* Henlock (1803–1884), and to his grandmother who died when he was six years old. A long-established local family, the Stubbses included yeomen farmers and weavers dating back in the records to the fourteenth century.[4] Stubbs was the most brilliant and distinguished member of a family which had formed the 'silent strength of England in the Middle Ages'.[5]

It was almost forty years after he left Knaresborough and Yorkshire that Stubbs had the opportunity to reflect upon his early years, his forebears and their associations with the history of Knaresborough. He did this not in a memoir but in two lectures, the first given at Crewe in 1886 and the second at Reading three years later. From his earliest days Stubbs had a strong affinity with history and the church, his two future careers. With a dose of literary licence he told his audience that he had been born 'under the shadow of the great Castle'.[6] Stubbs went on to tell of his childhood, of how he wanted to go for walks with his grandmother along the 'Dansbury road', touching the stones as he went to get from them a sense of the past. One of Stubbs's first memories of his father was when, during a drive, he was taken across the battlefield of Marston Moor where Cromwell defeated Prince Rupert on 2 July 1644. A somewhat prophetic moment came when Stubbs was still very young. According to his mother's account, Stubbs as a young child waited to watch the Bishops of Chester and Ripon go by in procession on their way to hold a confirmation. The Bishop of Chester laid a hand on the child's head as he passed. On his return home William insisted that 'he too would become a bishop'. Included in the memories of William's childhood were ones that he was a bright boy, quick to learn how to read, and that he had 'quaint habits' such as crumbling his bread in his grandfather's manner.[7] Two cut-out silhouettes of the young William show him to be a smartly turned-out child in George IV style great coats and hats.[8]

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[3] A small number of documents relating to William Morley Stubbs's legal work may be found in the West Yorkshire Archive Service (Leeds): see WYL 230/337, 29 Oct. 1824 and WYL 230/339, 29 Apr. 1836. For the numbers of attorneys, craftsmen and tradesmen, see *White's Directory for Knaresborough*, 1837.

[4] William Holden Hutton, *Letters of William Stubbs, Bishop of Oxford* (London, 1904), p. 3; an abbreviated edition of the book was printed in 1906. Originals of many of the published letters may be found in the Bodleian Library, Oxford at Bodleian MS Eng. Misc.e.148: Letters of Bishop Stubbs.

[5] Hutton, *Letters*, p. 3.

[6] Hutton, *Letters*, p. 5.

Stubbs was fortunate in his education. According to *White's Directory for 1837*, Knaresborough had nine academies, including one that took boarders. At the age of seven Stubbs was sent to what was considered to be the best school in the town. This was a 'classical and commercial' academy for sons of the professional classes from as far away as Harrogate, run by old Mr. Thomas Cartwright, a man of wide learning. Cartwright's school was held in an elegant house on Gracious Street, a thoroughfare that had once formed part of the original Anglo-Saxon ditch. As Stubbs recalled, Cartwright's was a type of 'Yorkshire school which is now utterly extinct'.[9] Mr. Cartwright's Academy produced a couple of eminent Victorians: Stubbs was one and the other was the future painter, William Powell Frith (1819–1909) from Harrogate. With works such as *Derby Day* (1858) Frith became one of the country's most celebrated artists, patronized by Queen Victoria. Stubbs's classmate and friend was William Kay (1820–1886), who became a renowned Hebrew scholar, Fellow of Lincoln College, Oxford, and Principal of Bishop's College, Calcutta. Stubbs chose Dr. Kay to preach the sermon at his service of consecration as Bishop of Chester at York Minster in 1884. Cartwright provided the young Stubbs with a thorough grounding in languages, especially French, German and Anglo-Saxon, all of which proved to be invaluable to the future historian.

Stubbs gained his formal religious education elsewhere. He studied the Bible with Mrs. Maria Stevens, a lady beloved throughout the town, and a relative of the Vicar of Knaresborough, the Reverend Andrew Cheap. Mrs. Stevens held her Bible classes in a room off Kirkgate, close by the station. Stubbs kept Mrs. Stevens's letters which she wrote to him while he was a boy, and whenever he visited Knaresborough he insisted on going past the 'old schoolroom' and recalled the place where he first learnt his texts of Scripture. In 1872 Stubbs was invited to deliver a sermon on the occasion of the restoration of the Parish Church of St John. During the sermon he commended that excellent lady, Mrs. Stevens, with her 'commanding eye' and 'eloquent voice', who had been the 'wisest counsellor' that he ever knew'.[10]

Knaresborough possessed one of the oldest secondary schools in Yorkshire, the King James Grammar School, founded in 1616. Guy Fawkes (1570–1606), King James's putative assassin, spent several years of his life at Scotton, about two miles from Knaresborough, and his family on his mother' side were the Harringtons. Writing to Dr. Collins in 1893, Stubbs noted that he was related to local families such as the Barrowbys and Dearloves, and that 'it would be amusing' to discover that he might be a 'cozin' to Guy Fawkes by another line 'besides the Harringtons'.[11] Stubbs did not attend King James's School, but was sent instead to Ripon Grammar School in 1839. For the future ecclesiastical historian of England, Ripon must have been an evocative place, with its associations with St Wilfrid (633–709).[12] The school was founded in Anglo-Saxon times and re-established in 1555 during the reign of Queen Mary.[13] Among the school's distinguished 'old boys' were an Archbishop of Canterbury, Matthew Hutton (1693–1758) along with a Bishop of Chester and London, Beilby Porteus (1731–1809) who was one of the first Anglican clergyman to challenge slavery. Located in a small building below the cathedral churchyard, the school was in those days rather a grim place, with savage discipline mixed in with Classical learning. A schoolmate of Stubbs's, Francis Pigou (1832–1916) who later became Dean of Bristol, recalled that the services in the cathedral were dreary, with Saturdays being reserved for 'preparation for the Sabbath'.[14] A copy of the Ripon Grammar School rules has survived in the Stubbs's family archive.[15]

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[7] Hutton, *Letters*, pp. 5-8

[8] Hutton, *Letters*, p. 9.

[9] Hutton, *Letters*, p. 10.

[10] William Stubbs, *A Sermon Preached on the Occasion of the Restoration of the Parish Church, Knaresborough, October 7th, 1872* (Oxford, 1872), reprinted (1975), pp. 6-7. Hutton, *Letters*, pp. 10-11.

During his school vacations from Ripon Grammar School, Stubbs spent his days among the archives of the Court House, an early seventeenth-century building located in the grounds of the Castle. Knaresborough was originally divided into three parts: the Forest, the Borough, and the Forest Liberty which included villages to the north of the town. Each of these divisions had its own court along with its own set of records. The Court of the Forest, or Great Court Leet, was held twice a year in the first floor of the Keep in a chamber called the 'King's Hall'. Most of the surviving records of the Honour of Knaresborough date from the reign of Edward III (1327–1377) down to the reign of Queen Anne (1665–1714). There is a large gap in the records before 1317. In that year John of Lilburn, Thomas of Lancaster's minion, captured the castle and its contents. Lilburn was forced to surrender the castle to Edward II (1284–1327) but, before he did so, he had many of the court documents burnt.[16] It was here, in the Knaresborough Court House, that Stubbs began to train himself to be a medieval historian by studying and copying original manuscripts. In time, he was able to read and absorb charters and documents at great speed. Knaresborough locals came to view 'the studious lad' as being someone quite out of the ordinary, and an old fellow townsman recalled that Stubbs was not 'one of them that write for writing's sake'.[17] Stubbs would spend the rest of his life 'immersed', as his friend Dr. Holland put it, 'in the dusty details of Charters and Rolls, of Inventories and Leases.[18]

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[11] Hutton, *Letters*, p. 382.

[12] W. H. Hutton, *St. Wilfrid*. York Minster Historical Tracts, 5 (London, 1927).

[13] Stubbs's school exercise books and other juvenilia are kept as part of the Ripon Grammar School records at the Borthwick Institute of Historical Research, University of York, at RGS/H.

[14] Francis Pigou, *Phases of My Life* (London, 1898); Hutton, Letters, pp. 12-14.

[15] Stubbs Family Papers,' Rules of Ripon Grammar School', dated 2 Sept. 1839.

[16] William Grainge, *The History and Topography of Harrogate and the Forest of Knaresborough* (London, 1871), p. 92. Francis Collins, *Wills and Administrations from the Knaresborough Court Rolls*, 2 vols (London, 1902).

During his lecture at Crewe in 1886, Stubbs recalled some of his early memories of news that stirred the township of Knaresborough. He remembered the fire at York Minster in 1829 begun by an arsonist, Jonathan Martin, in which the Quire and the East End were destroyed. Other memories included news of the death of George IV and of the 1830 revolution in Paris, an event that began the agitation for the Reform Bill.[19] Stubbs's family had a long association with political life. His grandfather was 'out in the Gordon Riots' that took place in June 1780. In 1890 Stubbs wrote to Dr. Collins to thank him for sending him records from Barroby and other local areas. 'The family details', he wrote, 'are interesting to me both as a descendant and [their] being connected to the Knaresborough Election of 1642–1644. The Barrobys, Bensons and Dearloves were very closely connected by marriage, and seem to have fought the battle for the royalist party against Mr. Stockdale and the Fairfaxes'.[20] During his Ripon schooldays Stubbs had developed a strong, life-long, Tory outlook, and so his support would have been with the Royalists.

Before the Reform Act of 1832 Knaresborough was a burgage borough, under the control of the Duke of Devonshire who was lord of the manor. One of Stubbs's grandfathers had been prosecuted by order of the House of Commons for a 'riotous attempt' to defeat the Duke's attempt to return two Members by forty of his non-resident tenants. These voters had no other qualifications than a 'deed of feoffment of a messuage' given to them as they entered to cast their votes, and which they then returned when they left. Stubbs remembered 1830 as being one of high excitement, as news came of revolution in Paris which in turn fired up demands for Parliamentary Reform. The great hope of the radicals, reformers and Yorkshire newspapers such as the *Leeds Mercury*, was Henry Brougham (1778–1868). Stubbs waved a 'true blue Tory' flag in Brougham's face, but Brougham retained the seat nevertheless. He held it for only a short time, though, relinquishing it when elevated to the Lords in the new Whig ministry.[21]

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[17] Hutton, *Letters*, p. 16.

[18] Hutton, *Letters*, p. 305.

[19] Hutton, *Letters*, p. 5.

[20] Hutton, *Letters*, p. 37.

[21] He was also elected for a more prestigious county seat but continued to hold Knaresborough in reserve until his ministerial position was confirmed. See Norman Gash, 'Brougham and the Yorkshire Election of 1830', *Proceedings of the Leeds Philosophical and Literary Society,* 8:1 (May 1956), pp. 19, 33; Hutton, *Letters*, p. 6.

The 1840s brought a severe economic downturn to both Knaresborough and the West Riding, a crisis about which Stubbs told his congregation in St John's Church in his 1872 sermon. His own family felt the effects of the crisis. William Morley Stubbs went bankrupt and died at the early age 42, leaving an impoverished widow with a precociously brilliant elder son and five other children to care for. Stubbs was to remember those difficult times. Writing from Oxford in 1884 to his friend and future editor of his genealogy, Dr. Francis Collins of Pateley Bridge, Stubbs wrote, 'Any note from your family or from Knaresborough' mean so much to me. I never forget the kindness of your aunt, Mrs. Atkinson, to me as a boy when I was in sore need of kindness in many ways'.[22] But Stubbs was spared an impoverished life in Knaresborough: the Church of England was to provide him with a ladder of opportunity.

Stubbs had a long family connection with the Anglican Church. All of his ancestors, he explained to his audience at Crewe, 'served the office of churchwarden in their time'.[23] He believed that the Church was the 'soul and spirit' of all 'true civilization and liberty'.[24] If Knaresborough provided Stubbs with a strong medieval background, it also had a distinct ecclesiastical background of its own. Christianity came early to Knaresborough. Conversions may have taken place at Kirkgate towards the end of the sixth century, and the Knaresborough Cross, which offers more evidence as to the early date of conversion, may now be seen at St Peter's Church, East Marton.[25] Bede (672–735) speaks of a Synod held 'near the River Nidd' in 705. The medieval parish church, built on an Anglo-Saxon site, was originally dedicated to the Virgin Mary but after the Reformation was rededicated to St John the Baptist. The Reverend Andrew Cheap was such an effective preacher that the local Congregationalists complained that he was luring their own members away with the power of his words.[26] Reflecting in 1899, Stubbs had fond memories of the town's vigorous religious life and wished that he could have the time to write a history of 'that time and neighbourhood'. Knaresborough, he recalled, was a centre of 'Evangelical energy', perhaps a little narrow and even slightly Calvinistic. The religious spirit of the town was one of pastoral care, missionary and school work, and devoted to the study of the Bible.[27]

As a youth, Stubbs would have been aware of the many survivals from Knaresborough's medieval past. A curfew bell rang at eight in the evening, as it had done since Norman times.[28] Vestiges from the Middle Ages were also preserved at Ripon where a horn was sounded to mark the hours of sunrise and sunset.[29] The archbishops of York had a residence in Ripon where they could still nominate justices, and there was a connection with Thomas à Becket, for Archbishop Roger of Pont l'Evêque (d. 1181) was one of his great enemies. In Knaresborough, vestiges of the old manorial and Honour courts still remained. The market was still held on Wednesdays, as it had been since at least 1310 when Edward II granted a charter to the town to hold markets and fairs. One reason why Stubbs was keenly interested in genealogy and family history was that, by doing so, he was helping to preserve and capture the medieval past before it vanished forever with the coming of industrialization and political reform. Knaresborough was situated on a hill with a spectacular location overlooking the Nidd gorge. What gave the town its particular historical distinction was its association, through the Forest and the Castle, with England's monarchs from the Normans to the Stuarts and also the ducal and royal House of Lancaster. From the reign of King John (1167–1216) onwards, Knaresborough was an important administrative and economic centre.

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[22] Hutton, *Letters*, p. 245.

[23] Hutton, *Letters*, p. 5.

[24] William Stubbs, *Seventeen Lectures on the Study of Medieval and Modern History* (Oxford, 1886), p. 18.

[25] Arnold Kellett, *Historic Knaresborough* (Otley, 1991), p. 3.

[26] Bernard Jennings, ed., A History of Harrogate and Knaresborough (Huddersfield, 1970), p. 388.

[27] Hutton, *Letters*, p. 11; E. E. Holmes (ed.), *Visitation Charges Delivered to the Clergy and Churchwardens of the Dioceses of Chester and Oxford by William Stubbs* (London, 1906), p. 347.

Textile manufacture was one of Knaresborough's major industries, with the soft waters of the River Nidd proving ideal for cloth production. Records for the woollen industry begin in the thirteenth century, with the first complete reference to a fulling mill dating from 1284. The name Tentergate in Knaresborough suggests that there may have been frames on which cloth was dried after fulling or dying.[30] Stubbs found quite a number of weavers in his ancestry. Knaresborough's medieval textile industry survived into the modern age, with linen of increasing importance. A seamless linen shirt, woven at Castle Mill, won the Prince Albert Medal at the Great Exhibition in 1851, while the Walton company supplied towels and linens for use in 'all the royal palaces'.[31]

Forty years on Stubbs evoked his family's place in local history during his lectures at Crewe and Reading. One great grandfather had a farm on the spot where in 1066 King Harold (c.1022–1066) had defeated the formidable Viking warrior Harald Hardrada (1015–1066).[32] After the Conquest, Knaresborough was granted to Serlo de Burgh. During the reign of Henry I (c.1068/9–1135) the Forest of Knaresborough was created and with it the need for a defensive position or castle. In 1130 Eustace FitzJohn (c.1100–1157) 'one of the chiefest peers of England', held the 'ferme of Bure and Chenaresburgh' for a rent of twenty-two pounds per annum.[33] While he was at Knaresborough, Eustace saved the starving monks of

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[28] Kellett, *Historic Knaresborough*, p. 6.

[29] Hutton, *Letters*, p. 16.

[30] Jennings, *History of Harrogate*, p. 93.

[31] Kellett, *Historic Knaresborough*, pp. 60-1.

[32] Hutton, *Letters*, p. 5.

[33] Grainge, *History and Topography of Harrogate*, p. 51.

Fountains Abbey by sending them a cart of fresh bread. One of Stubbs's great-grandfathers lived in an old manor house that had once belonged to the monks of Fountains Abbey.

The division of the Royal Forest of Knaresborough is first mentioned in 1167 and the Liberty of Knaresborough in 1169. Names such as 'Haya Park' are survivals from the time when parts of the forest were set aside for breeding and stocking deer for the royal hunt.[34] Only later did the Norman kings exploit Knaresborough Forest for charcoal and, especially, for its high-quality iron which was manufactured in bloomeries within the Forest. Stubbs counted among his forebears those who had served in the Forest in various capacities. A William Stubbs of the township of Clint is mentioned in a subsidy roll of 1377. His son John had a property at Birstwith and served as a reeve of the Forest. Stubbs later recalled that his ancestors had done 'suit and service' to Richard (1209–1272), King of the Romans, first Earl of Cornwall and youngest brother of Henry III (1207–1272). Other ancestors gave service to John of Gaunt (1340–1399) and Queen Philippa (1314–1369). The first recorded mention of a Stubbs ancestor was another William, from Birstwith, who in 1359 had to pay a fine for illegally cutting 'withes' and then later for cutting 'vert' at Okenden. John Stubbs held a grant of an oblate of land from John of Gaunt.[35] Some of Stubbs's ancestors had to pay the three Poll Taxes levied between 1377 and 1380. In 1892 Bishop Stubbs entered into correspondence with Mr. G. D. Lumb, secretary of the Yorkshire Parish Register Society and also of the Thoresby Society, regarding the social status of those who were charged to pay the Poll Tax. 'It is quite possible', Stubbs wrote, 'to identify the position and personality of the several payers. I have done so in some cases in the Knaresborough Court Rolls'.[36]

Of all the historical sites in the town, Knaresborough Castle had a particular hold in Stubbs's memory and sense of history. In his day the castle was a ruin. The victorious Parliamentarian forces began its demolition in 1648, and since then the site had become a quarry. Several periods from the castle's history were later to be of particular interest to Stubbs: Thomas à Becket (1118–1170), the reigns of King John and of Edward II, and in particular the era of the Lancastrian dynasty. In 1173 the lordship of Knaresborough passed to William de Stuteville. Through his marriage to Helwise de Stuteville, Hugh de Morville (d. 1204) became one of the most notorious owners of the Castle. He was close to the court of Henry II (1133–1189), a witness to several charters and one of the signatories of the Constitution of Clarendon (1164). De Morville was one of Thomas à Becket's murderers who fled, along with his fellow conspirators, to Knaresborough Castle. Stubbs was quoting the words of John of Brampton (fl. 1436–1464), Abbot of Jervaulx and chronicler, when he wrote that even the dogs under the table would not eat the crusts thrown to them by the murderers.[37] In her distress, Hugh's mother called out a warning of divine vengeance not in Norman French, but in English, the first example we have that the nobility were beginning to use the vernacular.[38] Hugh de Morville was authorized to strengthen the castle and he also built the church at Hampsthwaite in Becket's memory.

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[34] Charles R. Young, *The Royal Forests of Medieval England* (Philadelphia, 1979), p. 58. Now spelt Haverah Park, it contains the ruins of a tower known as 'John of Gaunt's Castle'.

[35] Francis Collins, ed., *Genealogical History of the Family of the Late Bishop William Stubbs, compiled by himself*, Yorkshire Archaeological Society Record Series, 55 (Leeds, 1915), p. 59.

[36] Hutton, *Letters*, pp. 380-1.

King John, for whom Stubbs had scant sympathy as a man whose adversity evoked 'no pity', needed fortresses in the North to suppress baronial discontent.[39] Part of that discontent was resentment against the harshness of the Forest Laws, and John, who had many enemies in the North, took control of Knaresborough (and also Scarborough) Castle, spending a considerable amount of money improving its defences. He made seven recorded visits to the castle, hunting in the Forest, and in 1210 for the first time distributed the Royal Maundy to local paupers.[40] King John made some seven visits to Knaresborough, more than to any other Yorkshire town apart from York or Pontefract. From John's reign onwards, Knaresborough was an important military and administrative centre in the north of England. Stubbs's interest in King John, as with so many Victorian historians, lay in the constitutional ramifications of his reign, and he edited a copy of Magna Carta.[41]

In 1307 Edward II granted the Honour of Knaresborough to his favourite, Piers Gaveston (c.1284–1312), a man who was detested by the barons. Gaveston spent over two thousand pounds on building a new keep within the castle. In 1312, during an uprising by the barons, Edward retreated to Knaresborough while Gaveston took shelter in Scarborough Castle. Gaveston was taken and beheaded on the orders of Thomas of Lancaster (c.1277–1322) and his fellow barons. In 1317 Knaresborough was captured by Lancaster's man, John de Lilburn until he surrendered it back to Roger Damory who took it in the King's name. After Edward II's calamitous defeat at Bannockburn in 1318, the Scots swept down and devastated both the town and the parish church. Thomas of Lancaster led another failed attempt against Edward II and was defeated at the Battle of Boroughbridge (1322). One of Stubbs's grandfathers not only had a house on the battle site itself but was also a churchwarden of the chapel where Thomas was captured by Edward's forces. This chapel may have been a chantry dedicated to Our Lady which stood close by the highway.[42] Thomas of Lancaster was executed at Pontefract. In death he acquired the status of a political martyr, a status he shared with Archbishop Scrope of York (d. 1405). In the minds of many among the common people, Thomas was a saint who had died for the cause of liberty, resisting a tyrannical king. His tomb, where miracles were said to be performed, became the focus for pilgrims.

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[37] Hutton, *Letters*, p. 6.

[38] Roger Dahood, 'Huge de Morville, William of Canterbury and Anecdotal Evidence for English Language History', *Speculum*, 69 (Jan. 1994), 40-56.

[39] Hutton, *Letters*, p. 66.

[40] Kellett, *Historic Knaresborough*, pp. 8-9.

[41] William Stubbs, *Magna Carta* (Oxford, 1868).

King Edward III married Philippa of Hainault in York Minster in 1328 and the royal couple spent their honeymoon at Knaresborough. Queen Philippa paid for the restoration of the parish church, the future St John's, which was a place of fond memories for Stubbs. A great chest which reputedly belonged to the Queen still survives.[43] Knaresborough was bestowed on the Queen as a gift, and on her death Edward III gave the Honour to his son, John of Gaunt (1340–1399), in exchange for Richmond. Gaunt, with his vast wealth and estates, became the first Duke of Lancaster. Thomas Chaucer (c.1367–1434) son of the famous poet and Speaker of the House of Commons, served as Constable of the Castle. 'One of my remoter forefathers', Stubbs said, 'held a gift of land from John of Gaunt'.[44] John of Gaunt's son, Henry Bolingbroke (1367–1413), and future Henry IV, having been exiled by Richard II (1367–1400), returned to Knaresborough in 1399. King Richard became Bolingbroke's prisoner and was lodged at various Lancastrian castles, such as Pickering and Knaresborough, and was murdered at Pontefract Castle. Knaresborough's status changed as it passed from ducal to royal hands, a complex process that Stubbs tried to explain to his cousin Fred Capes in 1891.[45]

Knaresborough was also an important centre for piety and pilgrimage, and a place where the Church would care for the sick and poor. In Kirkgate, in an area converted into shops during the nineteenth century, there were the remains of a hospital, or *maison dieu*.[46] The name 'Spitalfield' may indicate that there had been a leper hospital in that vicinity. But what attracted visitors and pilgrims was the cult of Knaresborough's own saint and hermit. Robert Flower (1160–1218) lived in a cave down by the River Nidd where he built a chapel dedicated to the Holy Cross. Robert was said to be able to commune with animals and distributed alms to the poor. King John came to see him, as did Edward III. While not canonized by the Pope, Robert was acclaimed as a saint, and had a *vita* written about him, along with a metrical 'Life'.[47] According to Matthew Paris, in the year 1238 'medicinal oil' flowed abundantly from St Robert's tomb, and the site was one of the major centres of pilgrimage in the country. The parish church at Pannal was later dedicated to St Robert. Friars of the Holy Order of the Trinity took over the cave, tomb and pilgrimage site.[48] Undistinguished for anything else, the Friary did have in its possession a superb 'Liber cosmographiae', a calendar and almanac magnificently illuminated, the work of a Yorkshire cleric, John de Foxton.[49] Famous in Yorkshire at least was 'Mother Shipton' (1488–1561) who famously predicted the fall of Cardinal Wolsey (c.1473–1530), founder of what became Christ Church, Oxford.

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[42] Sheeran, *Medieval Yorkshire Towns*, p. 64.

[43] Kellet, *Historic Knaresborough*, p. 20.

[44] Hutton, *Letters*, p. 5.

[45] Hutton, *Letters*, pp. 379-89.

[46] Sheeran, *Medieval Yorkshire Towns*, p. 82.

[47] Paul Grosjean, ed., 'Vitae S. Roberti Knaresburgensis', *Analecta Bollandiana*, 57 (1939); Joyce Bazaine, *The Metrical Life of St. Robert of Knaresborough*, Early English Text Society (Oxford, 1953).

Stubbs followed in a long tradition of which Wolsey was a part, where the Church provided educational opportunities for bright, but poor scholars. The early nineteenth century was a time when the Church of England could still exert considerable patronage. Knowing of Stubbs's family condition, the Reverend Robert Poole, Vicar of Ripon, approached the Bishop of Ripon, Charles Thomas Longley (1794–1868), to determine what he could do for the young Stubbs. [50] Longley had been a don at Christ Church before becoming Master of Harrow School. He was then appointed bishop to the new see of Ripon, the first bishopric created since the Reformation. In 1862 Longley became Archbishop of Canterbury. To honour its first modern bishop, the diocese installed a statue to Longley, which may be seen on the screen of Ripon Cathedral. Longley ascertained that Stubbs was a worthy candidate and helped to secure a scholarship at Oxford, and in 1844 Stubbs went up to Christ Church as a servitor. Servitorships were bestowed by the college upon those students who were deemed too poor to support themselves but able enough to prepare themselves for entry into one of the professions; intellectual distinction was not expected.[51] So Stubbs exchanged medieval Knaresborough for the Georgian elegance of the Peckwater Quadrangle. Completed in 1714, Peckwater was the first Palladian style, palace-fronted, building in England. [52] Stubbs's room was an attic with a fine view of the sky.

A diligent scholar, Stubbs studied the Classics, observed his fellow students and wrote satirical verses. He continued the process of historical training that had begun among the manuscripts at Knaresborough Court House, with his leisure hours being spent in the library at Christ Church. Stubbs studied medieval texts along with the works of Sir William Dugdale (1605–1686), an antiquarian who wrote about Yorkshire and its monastic houses.[53] The 1840s were a period of great upheaval in the University. John Henry Newman (1801–1891) was arousing enchantment among the students, and turmoil among University officials, with the Oxford Movement.[54] There was a great deal about the Oxford Movement that attracted Stubbs, and many other students. It was an intellectual force that encouraged the study of the Middle Ages, linking the Anglican Church to its pre-Reformation roots, and it also helped to inspire the Gothic revival style in architecture. Theologically, the Oxford Movement attempted to revitalize the Anglican church by raising the intellectual level of the clergy, by improving standards of worship and by establishing missions and churches among the poor in cities such as Leeds. Bishop Longley came into contact with the Oxford Movement through John Keble (1792–1866) but disliked the excessive 'ritualism' that the Movement produced. Stubbs survived the excitements of those years, took a First in Classics, and was offered a Fellowship at Trinity College. Then, in 1850, he was ordained and accepted the Trinity College living of the parish of Navestock in Essex.

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[48] 'The Religious Houses of Yorkshire. 103: The Trinitarian Friars of Knaresborough', in W. Page, ed., *The Victoria History of the County of York, vol. 3* (London, 1913), reprinted (Folkestone, 1974), pp. 296-300.

[49] John B. Friedman, 'John Siferwas and the Mythological Illustrations in the Liber Cosmographae of John de Foxton', *Speculum*, 58:2 (Apr. 1983), 391-418.

[50] Bernard Palmer, *A Class of Their Own: Six Public School Headmasters who became Archbishops of Canterbury* (Sussex, 1997).

[51] Hutton, *Letters*, p. 18.

[52] James Stevens Curl, *Georgian Architecture* (Newton Abbot, 1993), p. 26.

Navestock church dated back to the eleventh and twelfth centuries and the parish had been appropriated to St Paul's Cathedral.[55] Stubbs was later to have his own connections with St Paul's, serving as a canon and editing medieval texts associated with both the cathedral and the city of London. While at Navestock, Stubbs, true to his High Church principles, worked hard to raise the standards of parish life, having the bells rung, establishing a school, and tending to the care of souls. He also married and settled down with a growing family. These few years were crucial for his development as a historian and editor as well as for the preservation and publication of medieval chronicles and texts in England. The condition of England's medieval documentary heritage was deplorable: parchments were scattered throughout various depositories, such as the Tower of London, often kept in the worst possible conditions. England was far behind France and Germany, especially Prussia, where scholars were collecting, editing and publishing their medieval sources. Stubbs found the time to leave Navestock and travel the country in search of manuscripts that he might edit and publish.

There was one discovery in his native Yorkshire that brought particular pleasure. With the aid of James Raine (1830–1896), an editor of several northern registers[56], Stubbs came upon a previously unknown charter of King Cnut (c.985/995–1035) that they found in the library of York Minster. Further research was made possible when his old mentor, Longley, who by now was Archbishop of Canterbury, appointed him to be librarian at Lambeth Palace with its collection of manuscripts and documents. What Stubbs brought to his task as an editor was a degree of professionalism that was becoming the standard in Germany but was not yet fully known in England. To-day, Stubbs's reputation today rests chiefly on his scholarly editions, some nineteen in all, for the Rolls Series.[57] Northern England had a great tradition of scholar-priests in a line that reaching back to Bede.[58] The scholar-priest whose work most closely parallels Stubbs in its scope and insistence on establishing the facts of history, was a Roman Catholic, Father John Lingard (1771–1851), who served in an obscure parish in Lancashire.[59] Another was one of Stubbs's close friends, Mandell Creighton (1843–1901), who was educated at Durham School, went up to Merton College Oxford, and became vicar of Embleton in Northumberland. After serving as Dixie Professor of Ecclesiastical History at Cambridge, Creighton became an outstanding Bishop of London.[60]

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[53] Sir William Dugdale, *Abstract of Yorkshire Wills at the Time of the Commonwealth* (1665-1666) and the *Monasticon Anglicanism* (1718).

[54] Geoffrey Rowell, *The Vision Glorious: Themes and Personalities of the Catholic Revival in Anglicanism* (Oxford, 1983).

[55] W. R. Powell, ed., *The Victoria History of the County of Essex, vol. 4* (London, 1956), pp. 146-7.

[56] James Raine, *Historical Papers and Letters from the Northern Registers*. Rerum Britannicarum Medii Ævi Scriptores, 61 (London, 1873).

In 1866, the Conservative Prime Minister, Lord Derby (1799–1869) appointed Stubbs to be Regius Professor of Modern History at Oxford University. Stubbs had left Oxford as a student in the aftermath of the turmoil of the Oxford Movement; the Oxford to which he returned as Professor was in the throes of modernization and reform. A leading reformer was Stubbs's fellow Yorkshireman, Mark Pattison (1813–1884), of Lincoln College, the son of the rector of Hauxwell. Within this atmosphere of modernity and progress, Stubbs was the ideal choice to hold the office, the first Regius Professor to be trained in the discipline of history.[61] When he rose to give his Inaugural Lecture on 7 February 1867, a lecture delivered with traces of a Yorkshire accent and a mind trained in the German methods of scholarship, Stubbs began a revolution in the study of history in the English speaking world.[62] He broke the centuries-long grip that the Classics had held over the curriculum. and introduced the study of medieval history along with the concept of the modern professor. Stubbs was the last Regius Professor to also serve as a beneficed clergyman: along with his statutory duties at Oxford, he was parish priest at Cholderton, Wiltshire (1873–1879) and then at the University Church of St Mary.

As Regius Professor, Stubbs lectured and wrote on a broad range of subjects, from the Middle Ages to the Thirty Years' War. One of Stubbs's favourite lecture topics was Thomas à Becket. Archbishop Becket was also a subject of correspondence between Stubbs and E. A. Freeman, who then went on to quarrel fiercely over the matter with James Anthony Froude (1818–1894). Stubbs hoped that he could 'bring peace' between the two warring historians.[63] Another favourite subject was the reign and court of Henry II.[64] Stubbs sought to change his students' outlook on history: the Classical past was a skeleton that had been well picked over. By studying the medieval past, students could begin to comprehend the development of liberty and freedom. Christianity, 'with its intellectual and spiritual life, its work with the sword, the plough and the axe', gave the modern world its living unity. And modern history was the 'the history of ourselves'.[65] What Stubbs was imparting to his students, and to future generations, was the fruit of his own studies and the rich historical and religious background that Knaresborough and Yorkshire had given him.

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[57] W. Stubbs (ed.), *A Charter of King Canute From the York Gospels* (1875), reprinted (1891).

[58] Charles V. Gorton, *The Venerable Bede and Bishop Stubbs: or History from a Clerical Point of View* (Oxford, 1901).

[59] Peter Phillips, *John Lingard: Priest and Historian* (Leominster, 2008).

[60] A statue of Creighton may be seen in the choir of St. Paul's Cathedral. Louise Creighton, *Life and Letters of Mandell Creighton*, 2 vols (London, 1904).

[61] J. R. Hale, *The Evolution of British Historiography* (Cleveland, 1964), p. 56.

[62] Robert Brentano, 'The Sound of Stubbs', *Journal of British Studies*, 6:2 (May 1967), 1-14.

New history courses at Oxford needed more than lectures: students needed a reliable textbook of English history and also access to documents and sources that would illuminate that history. Stubbs provided the documents with his *Select Charters* (1870), a text that has been used by generations of students, and the epic, three-volume *Constitutional History of England* (1874–1878). A great deal of Stubbs's Yorkshire roots can be detected in this vast narrative of England's history. A true Yorkshireman, Stubbs was devoted to the concept of liberty. Knaresborough had provided visual, documentary and family evidence of history, one that had begun in Anglo-Saxon times. England's liberties began with the Anglo-Saxons, were crushed by the 'Norman Yoke', but ultimately freedom triumphed with the development of Parliament. Central to this constitutional progress was the Lancastrian dynasty, beginning with Thomas of Lancaster, which 'had risen by advocating constitutional principles and by constitutional principles they had governed'.[66]

The curriculum at Oxford's School of History, and in many universities in the English-speaking world, was established on medieval lines because of Stubbs. E. A. Freeman, who was perhaps the foremost exponent of Norman history in his day, built on that foundation. However, Stubbs's most lasting legacy lay beyond the printed page. At Oxford Stubbs inspired a generation of leading medieval scholars, and they in turn, became eminent medievalists in their own right. These students, and then their students, brought the study of medieval history to the north. Thomas Frederick Tout (1855–1929) left Oxford for what became the University of Manchester which was to produce its own 'school' of historians, and today has a flourishing department for Anglo-Saxon studies. One of Tout's students was Vivian Hunter Galbraith (1889–1976), and one of his students and protégés was John Taylor (1926–2009) of the University of Leeds who carried on the work begun by Stubbs with his scholarly editions of medieval literary, chronicle and parliamentary sources and continued Galbraith's study of the Anonimalle Chronicle (1333–1381) produced at St Mary's Abbey, York. This chronicle contains an account of the Good Parliament (1376) as well as an important contemporary account of the Peasant's Revolt (1381). Professor Taylor was instrumental in having this manuscript brought to the Leeds University Brotherton Collection.[67]

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[63] Hutton, *Letters*, p. 182.

[64] William Stubbs, *The Early Plantagenets* (London, 1874); *Seventeen Lectures on the Study of Modern and Medieval History* (Oxford, 1886).

[65] Stubbs, *Seventeen Lectures*, pp. 14-15.

[66] Paul Strohm, *England's Empty Throne: Usurpation and the Language of Legitimation, 1399–1422* (New Haven, 1998). It remained for another Yorkshireman, Herbert Butterfield, to demolish this particular version of England's past in *The Whig Interpretation of History* (Cambridge, 1931).

In 1884 Stubbs stepped down from university life and academic history when he was offered the bishopric of Chester. He would have left Oxford in 1875 when the one bishopric that he really wanted, that of Ripon, fell vacant but the Conservative Prime Minister, Disraeli (1804–1881), did not nominate him for the post. It was left to the Liberal Prime Minister and High Churchman, William E. Gladstone (1809–1898), to make Stubbs a bishop. On 25 April Stubbs was consecrated in York Minster in a ceremony that failed to impress E. A. Freeman: 'How feeble an English procession is', Freeman wrote, 'and how our bishops want something more. Why, many of the doctors at Edinburgh were finer'.[68] Stubbs was enthroned as Bishop in Chester Cathedral on 24 June 1884. Then there were visits to Yorkshire: Settle and Coatham were among his favourite places. Stubbs had visited Coatham in 1872 to deliver a sermon.[69] Mark Pattison, Stubbs's friend and Rector of Lincoln College, had a sister, Dora Wyndlow Pattison (1832–1878), who became an Anglican nun at the convent in Coatham and was famous as 'Sister Dora' who worked as a nurse and surgeon in Walsall.[70] The year 1884 was a turning point in Stubbs's life in another way: his mother died that year, breaking a link with Knaresborough.

The diocese of Chester was among the newer English bishoprics, having been founded in 1541. Once extending far to the north, including Westmorland and parts of Yorkshire, including Knaresborough, the diocese was reduced with the creation of new dioceses such as Ripon (1836), Manchester (1847) and Liverpool (1880). Like Knaresborough, Chester was a market town with a history going back to the Romans and early English. One of Stubbs's favourite medieval monarchs, Edward I (1239–1307) had visited Chester. Henry Bolingbroke imprisoned Richard II there. The Benedictine Abbey of St Werburgh had produced Ranulf Higden

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[67] Leeds University Library, Brotherton Collection MS 29, Anonimalle Chronicle; John Taylor, *English Historical Literature of the Fourteenth Century* (Oxford, 1987) and with Nicholas Pronay, *Parliamentary Texts of the Later Middle Ages* (Oxford, 1980).

[68] Hutton, *Letters*, p. 253. Freeman had just returned from Edinburgh, where had received an honorary LL.D.

[69] William Stubbs, *A Sermon Preached on the Anniversary of the Consecration of Christ Church, Coatham* (Oxford, 1872).

[70] Margaret Lonsdale, *Sister Dora* (Boston, 1892).

(c.1280–c.1363), author of the *Polychronicon*. There was a great deal of work to be done in Chester: the cathedral was in a ruinous condition until Sir Gilbert Scott (1811–1878) renovated the fabric. Stubbs devoted his formidable energies to administration, church building, establishing schools and, again in keeping with High Church ideals, he raised standards of clerical education and performance. Bishop Stubbs was aware of the work of other High Churchmen in Yorkshire: Dr. W. F. Hook (1798–1875), for example, who had built Leeds parish church (1837–1841), consecrated by Bishop Longley and with its great window paid for by the pennies of the poor. Stubbs would have been saddened by the news of what had happened in another church in Leeds, St Saviour's. His friend and mentor at Oxford, the famous Hebrew scholar Dr. Edward Bouverie Pusey (1800–1882) was a leading and highly controversial Tractarian. Pusey had paid, anonymously, for the establishment of St Saviour's (1842–1845) in one of the poorest areas of Leeds. With its emphasis on images, ceremonies and Mariolatry, the church was regarded by Longley as being excessively ritualistic, filled with 'dangerous doctrines' and the 'corruptions of Rome'. In consequence Longley imposed a severe ecclesiastical discipline on the clergy of the parish, several of whom did go over to Rome in the early years.[71]

Stubbs was content with his work at Chester, but in 1889 Lord Salisbury (1830–1903), another High Churchman, offered him the diocese of Oxford. The once poor scholar from Knaresborough who had come up to Christ Church as a servitor now returned to the cathedral as its bishop. He was the fifth graduate of Christ Church since the sixteenth century to return and serve as bishop. Along with the bishopric came the palace at Cuddesdon. Stubbs found the village to be attractive, with a fine Norman church, but the palace itself was enormous and inconveniently distant from Oxford and the diocese. Next door to the palace was a theological seminary created in 1854 by Bishop Wilberforce (1805–1873). This time Stubbs did not find Episcopal life to be congenial. The diocese was too large and was suffering from the severe effects of the agricultural depression, and relations with the Dean and Chapter at Christ Church were strained. Stubbs found solace, as he once had done as a student, among the manuscripts in the Bodleian Library. There were enlivening visits to London, to Lambeth Palace and to his club. In 1899 Bishop Stubbs wrote to his son Tom, telling him of a dinner that he had attended the night before where he had sat next to Herbert Henry Asquith (1852–1928) who was born in Morley, Leeds, and served as Home Secretary: 'Barring his politics', Asquith had been a fine fellow, a good Yorkshireman, despite the fact that he lacked the Stubbsian pedigree of being neither an 'Askwerth nor an Ayscough'.[72]

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[71] Bishop Longley, *Letter to the Parishioners of St. Saviour's, Leeds* (London, 1851); *The Oxford Dictionary of the Christian Church* (Oxford, 1997), p. 995; Nigel Yates, *The Oxford Movement and Parish Life: St Saviour's, Leeds, 1839–1849*. Borthwick Papers, 48 (York, 1975).

[72] Stubbs Family Papers, Bishop Stubbs to Thomas Stubbs, 16 June 1899. Asquith was to become Prime Minister in 1908 and first Earl of Oxford and Asquith in 1925.

Lord Acton (1834–1902) asked Stubbs to return to the field of historical writing by becoming involved in his scheme to establish the *Cambridge Modern History*. Stubbs had to decline: 'All my life', he wrote, 'I have been an early worker: most of the writing being done before 10:00 AM in the morning. Now I find it impossible to return to literary work. I am nearly 72, so I hope you will excuse me'.[73]

The last seventeen years of Bishop Stubbs's life saw him return, intellectually if not physically, to Knaresborough. This was a process that began with his two public lectures at Crewe and Reading, and continued with his study of Knaresborough and Yorkshire wills, leases and genealogies. It was to be an enterprise that lasted almost to the day he died. Under the heading 'Favourite Recreations' in *Who's Who*, Stubbs listed 'making out pedigrees and correcting proof sheets'.[74] After he saw Stubbs's manuscript carefully detailing his family history back to the fourteenth century, W. H. Hutton noted that 'one of the excellent Yorkshire societies ought to print it: there has been no such contribution to the history of Yorkshire families for many years'.[75] Sir James Stubbs wrote that his 'eldest uncle's' method of editing seems to have been to send 'every possible piece of paper to the printer's in one gorgeous muddle'.[76] The manuscript of the genealogy, edited by Stubbs's friend Dr. Collins, was published by the Yorkshire Archaeological society in 1915.[77]

Stubbs took an intense, personal interest in the northern learned societies, occasionally finding fault with them. He sent a cheque for a subscription to the Thoresby Society, asking for its publications to be sent to Cuddesdon either by 'GWR or by parcel post'.[78] The Bishop thanked Mr. Lumb for getting him elected as a member of the Thoresby Society and asked for information to be found in the Leeds Registers, praising Lumb's edition of the Adel Registers. 'I am growing old', the Bishop said, 'or I would have come to make the search myself'.[79] The Bishop seems to have some complaints. 'I do not like', he wrote to Collins, 'the Report of the *Arch. Journal and Record Society*. It looks as if interest was flagging: sure there ought to be no question of dropping the Will Catalogues. The notes on the Religious Houses were scarcely sufficient: and the Royalist Composition papers one might have too much of. But the Catalogues or Calendars are indispensable'.[80] Bishop Stubbs was particularly pleased, however, with the work of Mr. Henry Eshelby with the Cundall Registers: 'He has made a nice book of those Registers, and I wish that his example might be spread'.[81]

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[73] Cited in Roland Hill, *Lord Acton* (Yale University Press, 2000), p. 495, n. 79.

[74] *American Historical Review*, 6:4 (July 1901), p. 868.

[75] Hutton, *Letters*, p. 378.

[76] Stubbs Family Papers, Sir James Stubbs to the Town Clerk of Knaresborough, 13 Apr. 1975.

[77] Collins, *Genealogical History of the Family of the Late Bishop Stubbs*. See also Yorkshire Archaeological Society: MS 374. A copy of the genealogy is to be found in the Stubbs Family Papers.

[78] Hutton, *Letters*, p. 380.

[79] Hutton, *Letters*, p. 383; G. D. Lumb, *Registers of the Parish of Adel, 1606–1812*, Thoresby Society Publications, 5 (1895).

[80] Hutton, *Letters*, p. 384.

A couple of descriptions of Bishop Stubbs survive from these last years. Thomas Escott wrote that by this time Stubbs had become 'a figure of portly build, below middle height: a grand head, thick eyebrows, overhanging, piercing but humorous eyes, quick and jaunty, with an agility suggestive of intellectual swiftness within'.[82] W. H. Hutton described Stubbs as having a 'short strong figure, with a massive head, broad white forehead, a great brow, extraordinarily expressive eyes, twinkling with humour, and keen piercing eyes'.[83] Towards the end of his life, Stubbs accumulated honorary degrees from universities as far away as Kiev and many awards and decorations. As a young clergyman Stubbs had begun to draw favourable attention from German scholars, and in 1879 the Emperor conferred on Stubbs his nation's highest decoration, the Order of *Pour le Mérite*. Only thirty-three foreigners were singled out for this distinction, including the Scottish historian Thomas Carlyle (1795–1881) and the American poet, Henry Wadsworth Longfellow (1807–1882). Stubbs had a considerable following in the United States, and the American Historical Association gave its highest award, the Honorary Foreign Member, to Stubbs, only the second after Leopold von Ranke (1795–1886). As Bishop of Oxford, Stubbs was also Chancellor of the Order of the Garter. It was in his capacity as Chancellor that Stubbs, despite being very ill himself, gave the sermon at Queen Victoria's funeral in St George's Chapel, Windsor in the presence of King Edward VII and Kaiser Wilhelm II.

Bishop Stubbs's doctor recommended that he retire. Before he did so, Stubbs burnt many of his letters and manuscripts, but several letters from his final days attest to his continuing interest in Yorkshire history. He wrote to G. D. Lumb on 1 April 1901: 'In the early days of the Yorkshire Archaeological Society it was proposed to have, at Leeds or Wakefield, a sort of volunteer depository for saving old deeds and papers that might go, according to the custom of the time, to the slaughterer'. Stubbs had bought a bundle of deeds, bonds and leases relating to the neighbourhood of Pickering, and was there any repository that could be found for such documents that would otherwise have been destroyed? During the last days of his life, Stubbs was still dedicated to what he had done as a young clergyman at Navestock, collating and preserving precious historical documents and texts. Another letter to Lumb on 3 April 1901, gives a summation of Bishop Stubbs's life: 'I cannot give a good account of myself', he wrote, 'I have an awkward weakness of the part of me in which Yorkshire has so large a share, and it will, sooner or later make an end of me. So long as I last, I continue a devout Yorkshire man'.[84] Bishop Stubbs died on 22 April 1901 and was buried on the twenty-fifth in the village churchyard of Cuddesdon. Sir George Prothero (1848–1922) told the Royal Historical Society in 1902 that, 'Perhaps no English historian that ever lived did more to advance the study of the knowledge of English history, and to set the study of it on a sound basis, than Dr. Stubbs'.[85] An anonymous correspondent from Leeds wrote his own tribute, saying that, 'this was a heavy loss of one whose reputation was not merely English but European. We shall not see the day when his memory and fame will fade'.[86] To-day, a visitor to the parish church at Cuddesdon can see a memorial brass plaque to Bishop Stubbs in the chancel. Adjacent to the Bishop's Palace is the seminary established in 1854. In 1975, the same year that Stubbs's birthplace obtained its plaque, Cuddesdon College merged with Ripon Hall, founded at Ripon but latterly in Oxford, creating the present Ripon College, Cuddesdon. In one sense at least, Bishop William Stubbs had returned home.

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[81] Hutton, *Letters*, pp. 388 and 387. Henry D. Eshelby, *The Parish Register of Cundall with Norton-le-Clay, in the North Riding of the County of York, 1582 to 1780* (Liverpool, 1898).

[82] Thomas H. S. Escott, *Personal Forces of the Period* (London, 1891), p. 207.

[83] Hutton, *Letters*, pp. 402-3.

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[84] Hutton, *Letters*, pp. 400-1.

[85] Hutton, *Letters*, p. 402.

[86] Stubbs Family Papers, undated and unsigned letter.

'OF MODERN ORIGIN AND SPURIOUS CHARACTER': THE *HULL CELEBRITIES* AND THE JOHNSON MANUSCRIPT[1]

By Paul Leaver

The title of this article, 'Of Modern Origin and Spurious Character', is one of many comments made regarding a volume published in 1876 entitled 'Sketches of Hull Celebrities or Memoirs and Correspondence of Alderman Thomas Johnson and four lineal descendants from the Year 1640 to 1858' which was to embroil many people in Hull and the surrounding area in debate concerning its authenticity, including among others local antiquarians, councillors, a records clerk, and an M.P. and newspaper proprietor.

BACKGROUND

The publication of the *Hull Celebrities* and its precursor, the Johnson Manuscript, came at a time of increasing interest in the past throughout Europe.[2] Beginning in the late-eighteenth century and continuing into the nineteenth, this interest was expressed through many different aspects of society as the past was recreated or reinterpreted for new audiences: for example, in the art of Sir John Everett Millais, the literature of Sir Walter Scott, or in the Saxon histories of England produced by several authors.[3]

In Britain, much of this development was influenced by the Society of Antiquaries of London (1707) which moved to Somerset House in 1780 and inspired similar societies in Edinburgh (1780) and Newcastle upon Tyne (1813). Among the early products of the new fashion for city and town histories were Ralph Thoresby's *Ducatus Leodiensis* (1715) and Francis Drake's *Eboracum* (1736).[4] Hull was no exception to this development and several works on the history of the town were published, beginning with Thomas Gent, *Annales Regioduni Hullini,* (1735) and continued by such local antiquarians as George Hadley, *A New and Complete History of the Town and County of the Town of Kingston upon Hull* (1788), John Tickell, *The History of the Town and County of Kingston upon Hull* (1796), Charles Frost, *Notices Rela-*

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[1] Based on a paper presented at the BALH 'Means and Materials in Local History' Conference in Hull, November 2008.

[2] Rosemary Sweet '"Mere dull description": antiquarianism and local history in the eighteenth century', *The Local Historian*, 38:4 (November 2008), p. 244.

[3] Roy Strong, *And When did you last see your father?* (London, 1978), p. 33; Tristram Hunt, *Building Jerusalem* (London, 2005), p. 267.

[4] Rosemary Sweet, *The Writing of Urban Histories in Eighteenth-Century England* (Oxford, 1997); also Strong, pp. 48-9; Hunt, p. 179.

tive to the Early History of the Town and Port of Huli (1827) and J. J. Sheahan, *History of the Town and Port of Kingston upon Hull* (1866). Some of these early works were based on Abraham de la Pryme's unpublished manuscript history of Hull, written in about 1700. This was accepted uncritically because it was based on manuscript sources actually catalogued by Pryme.[5] Against this background the *Hull Celebrities*, based on the Johnson Manuscript, was published in 1876.

ORIGINS

Sometime before 1874, George Johnson, an 'elderly gentleman' purportedly from Great Yarmouth but lodging on Peel Street in Hull, wandered into the chemist and druggist shop of one William Anderson Gunnell on nearby Leonard Street.[6] Gunnell, later described as 'somewhat illiterate' was not particularly known as an antiquarian, although his obituary in the *Eastern Morning News* in 1885 did suggest he had 'dabbled'.[7] And it seems that on this particular day, this is just what Gunnell was doing, engaging in some antiquarian activity. Johnson noticed this and as a consequence offered to show Gunnell some old parchments and papers. Gunnell accepted this offer and through a series of regular visits, Johnson loaned these papers to Gunnell, which he then copied and arranged for publication. These copies of Gunnell's were to become known as the Johnson Manuscript.

PUBLICATION

The *Eastern Morning News* of 6 January 1876 carried a letter indicating that 'some original, rare, amusing and valuable manuscripts relating to Hull and her public men in olden times' would shortly be available.[8] By the time of their publication, a few weeks later, there was already an air of expectation. The book, when it appeared as a stout crown octavo volume of 534 pages, listed 500 subscribers. In addition it carried a note that a special resolution allowing Gunnell to dedicate the work to the Town Council had been passed on 6 May 1875, proposed by the Mayor, Charles Wells, and seconded by Councillor J. G. Willows.[9]

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[5] British Library. Lansdowne MS. 890, A. de la Pryme, 'History of Hull, 1697-1700', (copy in Hull City Library); Charles Frost, *Notices Relative to the Early History of the Town and Port of Hull* (London, 1827), pp. 3-4.

[6] [E. R. Kelly], *The Post Office Directory of the North and East Ridings of Yorkshire with the City of York*, (London, 1872), p. 426.

[7] J. R. Boyle, *A Modern Literary Fraud: The Johnson Manuscript* (Hull, 1893), p. 20; *Eastern Morning News* [*EMN*], 8 Apr. 1885, p. 3.

[8] *EMN*, 6 Jan. 1876, p. 3.

[9] Hull City Archives, TCM/11, Minutes of the Hull Town Council, pp. 11-12; and William A. Gunnell *Sketches of Hull Celebrities* (Hull, 1876), p. i.

In his introduction to the sketches, Gunnell indicated that he had compiled the volume from manuscripts written from 'personal observation' and passed to him initially for 'mere perusal'. He went on to add, not only that were they amusing and of interest, but also that they contained 'matters which have never been recorded in any publication'.[10] He explained that the book was made up of the observations and reminiscences of several generations of the Johnson family, starting with Thomas Johnson in 1640, followed by Matthew Johnson, Laurence Thomas Johnson, and David Johnson, with George Johnson the last. The book started with a description of Hull in 1640, initially with the High Street, then going on to Trinity Church, or Kirk as Johnson has it, followed by other areas of the town. It then gave biographical details of many famous and significant figures in Hull's history: mayors, merchants, MPs, benefactors and the like, or, as they are known in the book, celebrities. It started with Henry Vane the Elder and included men like John Lister, Andrew Marvell, William and Henry Maister, and William Gee. Interspersed throughout were commentaries on later events and places. All these were said to have been written by Johnson family members.

The final entry, apart from the pedigree and particulars of the Johnson family from 1491 to 1858, written by George Johnson, the last surviving family member, was a portrait of William Digby Seymour, dated 1857. He was described as a barrister and parliamentary candidate for the town. Gunnell pointed out that much of the book was written in a 'quaint old Yorkshire English style' and so he helpfully provided a glossary at the back. The following is an example from the section on the life of Sir John Lister:

> Bee y^{e} offhott o Jhon Lyster, who wase y^{e} shirff on Hvll yn 1590,
> y^{e} Maire yn 1595 an agayne, y^{n} 1612, an Deyde yn 1616, an wase Funeratid
> y^{n} y^{e} Kirk o Holie Trinitie. Y^{e} aboone Sir Jhon Lyster
> wase y^{e} Maire, yn ỵe yeeres 1618 and 1629. Ye Housen hee
> alyvid y^{n} bee y^{n} y^{e} High Streete.[11]

This format, describing people, places and events, was not unusual in the writing of local history.[12]

However, within weeks of its publication, doubts were creeping in. On 17 June 1876 an anonymous letter appeared in the *Eastern Morning News* questioning the authenticity of elements of the book, and pointing out why 'the description … staggers our faith in the story of the manuscript having been written in 1640'.[13]

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[10] Gunnell, p. vi.

[11] Gunnell, p. 39.

[12] Sweet, "Mere dull description", p. 248.

[13] *EMN*, 17 June 1876, p. 4.

Gunnell responded two day later, but the opening salvos had been fired.[14] What was it about the Johnson Manuscript that would cause such debate? Two areas can be identified: questions about its origins, and issues around the text itself.

THE ORIGINS OF THE TEXT

Gunnell never actually explained how he acquired the Johnson Manuscript. This was left to others, in accounts that were to appear only later. The explanation offered above was that proffered by John Symons (1823–1907) in his 1884 book, *Hull in Ye Olden Times*. Symons was Hull born and bred, and initially trained as a printer before becoming involved with the family silversmith business. He was at various times a poor law guardian (eventually holding the office of deputy governor), a town councillor, alderman and sheriff and he developed an interest in local historical issues, writing articles for the local press. In 1871, he had been elected a member of the Royal Irish Academy.[15] However, a later version of the acquisition process, published in 1893, had Gunnell begging Johnson to be allowed to publish. What is clear is that the various accounts were inconsistent. Another had Gunnell passing all the papers back to Johnson just before he left Hull; whilst a further had Gunnell posting them back to Johnson's address in Great Yarmouth but having them returned as undeliverable. Yet on a previous occasion Gunnell had claimed he did not know Johnson's address either in Hull or Great Yarmouth.[16]

So who was this mysterious George Johnson? For a man from such a prominent Hull family and brought up in the town, he was not very well known. The only person who seems to have met Johnson on more than one occasion, apart from Gunnell, was John Richardson, a man who appears to have been closely involved with the manuscript from the start. Richardson (1806–1885) perhaps one of Hull's greatest characters, was a surgeon-dentist, town councillor for West Sculcoates, local antiquarian, collector of historic records and a writer. He contributed articles to both the *Hull Packet* and the *Eastern Morning News* as well as publishing his own works. Richardson was also deeply involved with the Hull Mechanics Institute, giving many lectures there was well as holding office. His obituary in the *Eastern Morning News* reported that he was a 'character who was noted for his trickery and waggery', a description to be born in mind.[17]

Witnesses to the alleged transactions between Johnson and Gunnell were few and dubious. A resident of Hull's Charterhouse, John Booth, was apparently prepared to identify Johnson entering Gunnell's shop and passing over some papers, but was 'unable to offer any evidence that the individual he saw really was a George Johnson'.[18] Although residing on the same street, Gunnell himself was unable to identify which lodging was Johnson's. Johnson, it appears, arrived from Great Yarmouth, made regular visits to Gunnell, left bundles of old papers, and then disappeared.

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[14] *EMN*, 19 June 1876, p. 2.

[15] *Hull News*, 26 Jan. 1907, p. 11; W. G. B. Page, *Historic Houses in Hull* (Hull, 1907), p. 28.

[16] Boyle, pp. 16-19.

[17] *EMN*, 2 Oct. 1885 p. 4.

PROBLEMS WITH THE TEXT

Despite a lecture by Symons delivered at the Hull Mechanics Institute in December 1876, indicating that the volume was 'a valuable addition to the early annals of the town',[19] from its initial publication most of the criticism largely focused on its alleged historical errors. Two days after Symons's lecture, Frederick Brent Grotrian, some-time proprietor of the *Hull Daily Mail* and later Conservative MP for Hull East (1886–1892), wrote to the press, doubting the book's authenticity.[20]

The principal critic of the volume, though, was John Roberts Boyle (1853–1907) who was born in Accrington and later joined the Swedenborgian New Church as a pastor. This initially brought him to Hull. He then moved to Gateshead with his family, before returning to Hull in the early 1870s. As well as being a pastor, he was an author and antiquarian. In 1889, he became a fellow of the Society of Antiquarians.[21]

Boyle identified many problems, covering such areas as the use of inappropriate language, anachronisms, issues of pedigree, conversations held by individuals after they were said to have died, and examples of plagiarism. One difficulty concerned the instigator of the manuscript, Thomas Johnson, who became mayor of Hull in 1672. Boyle observed that the manuscript contained a purported example of Johnson's handwriting, but that this did not compare with a genuine sample found in the borough records held by a leading local antiquarian, Thomas Tindall Wildridge.[22] Another example involved a building on the High Street in Hull, formerly known as the King's Head. *Hull Celebrities* suggested this had been demolished and rebuilt twice in the mid-sixteenth century, yet Boyle claimed that, as 'any student of English domestic architecture' would know, it was an early fifteenth building.[23] A third illustration was that in 1654 the many friends of Henry Chambers persuaded him to become a town candidate (for what, the manuscript did not elucidate) – which was interesting since Chambers had been dead since 1652![24] A final example was the view from Sir John Lister's house in around 1641 which, as Boyle observed, included the towers of St. Mary's and the Carmelite Friary which would not have been standing at that date.[25]

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[18] Boyle, p. 17.

[19] J. Symons, *Hull in Ye Olden Times* (Hull 1884), p. 30.

[20] EMN, 30 Dec. 1876, p. 3.

[21] Thomas Sheppard, 'Memoriam to J. R. Boyle', *Yorkshire Notes and Queries 1907-08*, 4 (1907), pp. 182-3; Census for England & Wales, 1891, RG12/4185 f. 60, p. 20.

[22] Boyle, p. 27.

[23] Boyle, p. 39.

Symons recognised that there were some errors, or perhaps 'a little high colouring', but did not doubt the authenticity of the manuscript.[26] However, J. Goulton Constable of Brigg, described at the time as a man who had an 'antiquarian knowledge of Lincolnshire beyond question', described the book as 'rubbish' after identifying errors relating to that county.[27] W. W. Bean pointed out anachronisms and errors in some election results, as did Boyle who further went on to observe that many of these results, inaccurate as they were, had also appeared in Sheahan's history of Hull published some years earlier.[28] Boyle found another example of plagiarism with the description of the white friary ruins, taken, with a few alterations, from Hargrove's *History of Knaresborough*, published in 1809.[29]

Boyle also pondered how Thomas Johnson at sixty-nine years of age seemed to be spelling words in exactly the same way as he had at the age of ten: signs of a very precocious talent perhaps?[30] He then considered the quaint old Yorkshire English words which, he said, would be very difficult to recognise whether as quaint old English or Yorkshire in such forms.[31] For example:

ypyghtid	placed
fownes	frames
sweyghes	sounds
skaddleful	hurtful
fraughtagid	conveyed
aunder	afternoon

Boyle was further concerned about inconsistencies between the published volume and the original manuscript. Whilst, he suggested, it could be argued that sections omitted from the book that appear in the manuscript could be explained by the need for editing, when the reverse occurred, elements appearing in the

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[24] Boyle, p. 32.

[25] Boyle, p. 30.

[26] Symons, *Hull in Ye Olden Times*, pp. 5 and 1.

[27] *EMN*, 20 Sept. 1883, p. 3; *Hull Packet*, 21 Sept. 1883, p. 2.

[28] *EMN*, 24 Mar. 1883, p. 2; Boyle, p. 34.

[29] Boyle, p. 35.

[30] Boyle, p. 23.

[31] Boyle, p. 23.

book that did not appear in the manuscript, then questions about authenticity did need to be addressed.[32]

THE CONTROVERSY CONTINUES

The ensuing years saw the debate continue, with letters appearing regularly in the press, attacking and defending the *Hull Celebrities*. Gunnell offered to provide proof of its authenticity but never seemed able to do so. Over time the dispute became more bitter. Richardson complained that Boyle was trying to make 'the document appear ridiculous because a few printers errors' had crept in.[33] Symons at one point suggested that he 'wouldn't even blacken the end of a quill' in the hope of converting Boyle to the authenticity of the Johnson Manuscript. Such, said Boyle ironically, was the importance of Symons and the insignificance of Boyle.[34]

Even the deaths of Gunnell and Richardson in 1885 did not end the argument, with many people seemingly unable to let go. On 19 December 1892 Boyle presented a paper to the Hull Literary Club clearly laying out his objections to the Johnson Manuscript. However this provoked a response the very next day from Joseph Temple (1824–1905), another local antiquarian, who defended it. Born in Cleethorpes, Temple had moved to Hull at an early age and trained as a printer before becoming involved in local politics. Tindall Wildridge observed that Temple owned the largest private library in the district and was particularly interested in collecting old newspapers.[35]

Later, in January 1893, Temple stated that proof of the authenticity of the manuscript would be submitted to the British Museum or the Public Record Office for verification, but he did not specify when. Boyle commented on this when his Literary Club paper was published that same year. It was in this published version that Boyle used the phrase at the head of this article: 'of modern origin and spurious character'.[36]

WHO WROTE THE TEXT AND WHY?

Despite the errors, it is clear that the author had some understanding of Hull's history, whether it was from a family perspective as claimed by the manuscript's supporters, or as an antiquarian writer. Boyle maintained from quite an early stage in the controversy that he thought the Johnson Manuscript was fictional and the work of Richardson. This he illustrated by comparing elements from the manu-

[32] Boyle, pp. 20-1.

[33] *EMN*, 9 Jan. 1879, p. 3.

[34] *EMN*, 30 Jan 1879 p. 4.

[35] T. Tindall Wildridge *Hull Old and New* (Hull 1889), pp. 270-3.

[36] Boyle, pp. 4 and 1.

script with articles written by Richardson in the local press, and analysing the literary style. In addition, another 'irrefutable piece of evidence' was that Charles Edward Fewster, (1847–1896) another noted local antiquarian and numismatist, had three volumes of the Johnson Manuscript in Richardson's handwriting.[37] These were probably among the 2,000 works on Hull in Fewster's own library. This was explained away by Temple who said Richardson had transcribed his own copy of the manuscript and then sold it to Fewster.[38] Twice in 1884, Richardson denied being the author, although Boyle suggested he had seen nothing that could be 'regarded as an absolute denial'.[39] Even on his deathbed, Gunnell maintained that the last surviving member of the Johnson family had given him the manuscript. However a consensus seemed to be emerging that Richardson was the author.

If we accept the manuscript as genuine, then the question of 'why' is irrelevant. However, if we accept that the manuscript was a forgery, as the *Eastern Morning News* suggested people were in the main believing by 1885, then why was it written? Was this a deliberate attempt to defraud contemporary antiquarians; a cynical attempt to make money; or a joke that went too far? Perhaps the key to this problem lies with that particular phrase in Richardson's obituary – a man 'who was noted for his trickery and waggery'. With regard to the *Hull Celebrities*, we should remember the ambiguous opening line of its introduction. 'This work does not profess neither does it lay claim to any pretensions to being a history of Hull'.[40]

AFTERMATH

The deaths of both Gunnell and Richardson did not end the controversy. Gunnell's obituary in the *Eastern Morning News* was still sympathetic towards him, describing him as sensitive and inoffensive, and adding that if Gunnell had taken steps earlier to offer proof of the authenticity of the Johnson Manuscript then perhaps he would have suffered less from the harassing attacks of unbelievers. It ended by urging its readers, 'let us think kindly of him now'.[41]

Richardson died six months after Gunnell. Temple remained unrepentant in his belief in the authenticity of the manuscript. He believed that there had been no new proofs that they was not the work of Johnson and his four lineal descendants and was still declaring this to be his position in 1893.[42] Symons, though, who died in 1907, did begin towards the end of his life to allow doubts to creep in. Temple's obituary of Symons noted that, although Symons quoted from Johnson in his final work, *Kingstonia*, he did not vouch for his accuracy.[43]

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[37] Boyle, p. 13.

[38] Joseph Temple *The Johnson Manuscripts: A Defence* (Hull 1893), p. 4.

[39] Boyle, p. 7.

[40] *EMN*, 2 Oct. 1885 p. 4; Gunnell, p. v.

[41] *EMN*, 8 April 1885, p. 2.

[42] *EMN*, 2 Oct. 1885, p. 3; and Temple, p. 1.

Boyle, the most consistent of the critics, went on to become Hull Records Clerk in 1895.[44] In 1905 he published his translation of the *Charters and Letters Patent* relating to Hull. However, this volume described the author as 'the late clerk to the Corporation'[45] because in the same year he had been convicted and imprisoned for stealing and pawning various letters, volumes and artefacts belonging to the Corporation.[46] On leaving prison, he became a recluse and, according to Thomas Sheppard of Hull Museums who wrote his obituary, refused to accept the help of friends, dying a broken man two years later.[47]

CONCLUSION

So why did so many leading figures of the day cling to their belief in the Johnson Manuscript? Perhaps we have modern parallels with Hugh Trevor Roper and others who took the so-called Hitler Diaries in 1983 to be genuine, or those who accepted the Solomon's Temple Tablet and James Ossuary in Israel in 2004.[48] There was a clear thirst for knowledge and in the excitement of discovery sound historical research was one of the first casualties. With vested interests and reputations being so publicly at stake, perhaps it was difficult for one side to accept that it was wrong. The town council had endorsed the work very publicly and Symons himself had in his own book used the *Hull Celebrities* as a credible source.[49] In addition, was there the 'Hull' factor as local antiquarians questioned the right of someone from outside the area like Boyle to challenge them about the history of 'their' town?

Like all good myths, the story of the *Hull Celebrities* and the Johnson Manuscript refuses to die but has entered into the canon of local history to trap the unwary. Some local historians are alert to the problem and in referring to the *Celebrities* give a clear warning about its authenticity.[50] However, there are many other places where the *Hull Celebrities* is referred to where there is still no such a caveat.[51] Richardson – or whoever the author was – mocked the gullibility of local antiquarians caught up in the fashion for authentic, manuscript histories in own his day, and his work still challenges local historians to question closely the origin and credibility of plausible sources, especially when they have been accepted by others and say what one would like them to say.

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[43] *EMN*, 23 Jan. 1907, p. 6.

[44] HCA, Minutes of the Property Committee Hull Corporation, 5 Apr. 1895, pp. 83 and 11 Dec. 1896, p. 17.

[45] Boyle, p. 1.

[46] HCA, Minutes of the Property Committee, Hull Corporation, 19 May 1905, p. 149.

[47] Sheppard, 'Memoriam to J. R. Boyle', p. 183.

[48] William A. Henry III, Gary Lee and Melissa Ludtke, 'Hitler's Diaries: Real or Fake?', *Time*, 9 May 1983, at www.time.com/time/magazine/article/0,9171,923630,00.html, accessed 16/01/2010; Ed Magnuson, Gary Lee and Melissa Ludtke, 'Hitler's Forged Diaries', *Time*, 16 May 1983, at www.time.com/time/magazine/article/0,9171,925946,00.html, accessed 16/01/2010; BBC News, 'Israel antique 'forgers' charged', BBC News Channel, 29 December 2004, at news.bbc.co.uk/1/hi/world/middle_east/4133065.stm, accessed 16/01/2008; and Bob Simon, *The Stone Box and Jesus' Brother's Bones*, at CBS News, 20 March 2008, at www.cbsnews.com/stories/2008/03/20/60minutes/main3954980_pa, accessed 10/10/2008.

[49] Symons *Hull in Ye Olden Times*.

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[50] Richard Hayton, *The Development of 'Public Houses' in Hull's Old Town*, Local History Resource Guide number 32, Local History Unit, Hull College, (1996), reproduced for 'Yorkshire History.com' (2006) at http://www.yorkshirehistory.com/pubs_DEVELOPMENT.htm, accessed 16/01/2010.

[51] For example it is provided without comment as a source of biographical information by ancestry.com and it was reprinted in 2007 by Kessinger Publishing as a 'culturally important' and 'rare historical book', without any warning as to its authenticity: see the Product Description on www.amazon.com/Sketches-Hull-Celebrities-Correspondence-Descendants/dp/0548303215/ref=sr_1_fkmr2_3?ie=UTF8&qid=1263644008&sr=1-3-fkmr2, accessed 16/01/2010.

NEWTON WALLIS: THE EVOLUTION OF A LANDSCAPE

By Edgar N. Pickles

Newton Wallis was a small medieval settlement on the north bank of the river Aire in the parish of Ledsham, which may have become deserted from the fourteenth century and was never more than a hamlet until the early nineteenth century when coal mining transformed the settlement. With the ending of mining in the mid-twentieth century the houses were demolished and the site became part of a nature reserve and Site of Special Scientific Interest known as Fairburn Ings.

THE EARLY HISTORY OF NEWTON WALLIS.

Newton Wallis is situated at the far eastern border of the present West Yorkshire on the northern bank of the river Aire, between Ledsham and Fairburn. It is now the site of a nature reserve but there still remain a few traces of its different pasts and more had survived until within living memory: a few houses near the Fairburn Royal Society for the Protection of Birds [RSPB] Visitor Centre, a sign at Bulholme Lock showing 'Footpath to Newton', some low walls on the roadside and a stone wall in the area of water known as 'The Moat' which is called Newton Abbey. Near the latter are three detached, inhabited dwellings and a collection of run-down farm buildings near the road. Early Ordnance Survey maps reveal the remains of a much more substantial village that included a colliery, a school and a chapel (see Fig.1).

At the time of the Domesday survey in 1086, Newton (meaning new farmstead) was held of Ilbert de Lacy of Pontefract by one Hunfrid de Villeis, whose family continued to hold the land until the beginning of the fifteenth century. The name Villeis evolved through various forms to give the modern Wallis, and the family developed extensive property interests in the area, including nearby Fryston and Fairburn, and gave their name also to Burghwallis, about twelve miles to the south. Medieval Newton was never very large: at the Poll Tax in 1379, eleven couples and four individuals paid the tax compared with over twice that number at Fairburn, and it may be that the village was wholly depopulated at the Black Death.[1]

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[1] A. Williams and G. H. Martin, eds, *The Domesday Book: a complete translation* (London 2002), p. 822; G. H. White, ed., *The Complete Peerage of England, Scotland, Ireland, Great Britain and the United Kingdom, extant, extinct or dormant. By G. E. C.* (London 1959), p. 317; 'Rolls of the Collectors in the West Riding of the Lay-Subsidy (Poll Tax), 2 Richard ii. Wapentake of Barkeston', *YAJ*, 6, pp. 129-49 (Newton Waleys, p. 145); M. W. Beresford, 'The Lost Villages of Yorkshire, Part 3', *YAJ*,. 38:2 (1953), pp. 215-40 (see p. 233 for Newton Waleys).

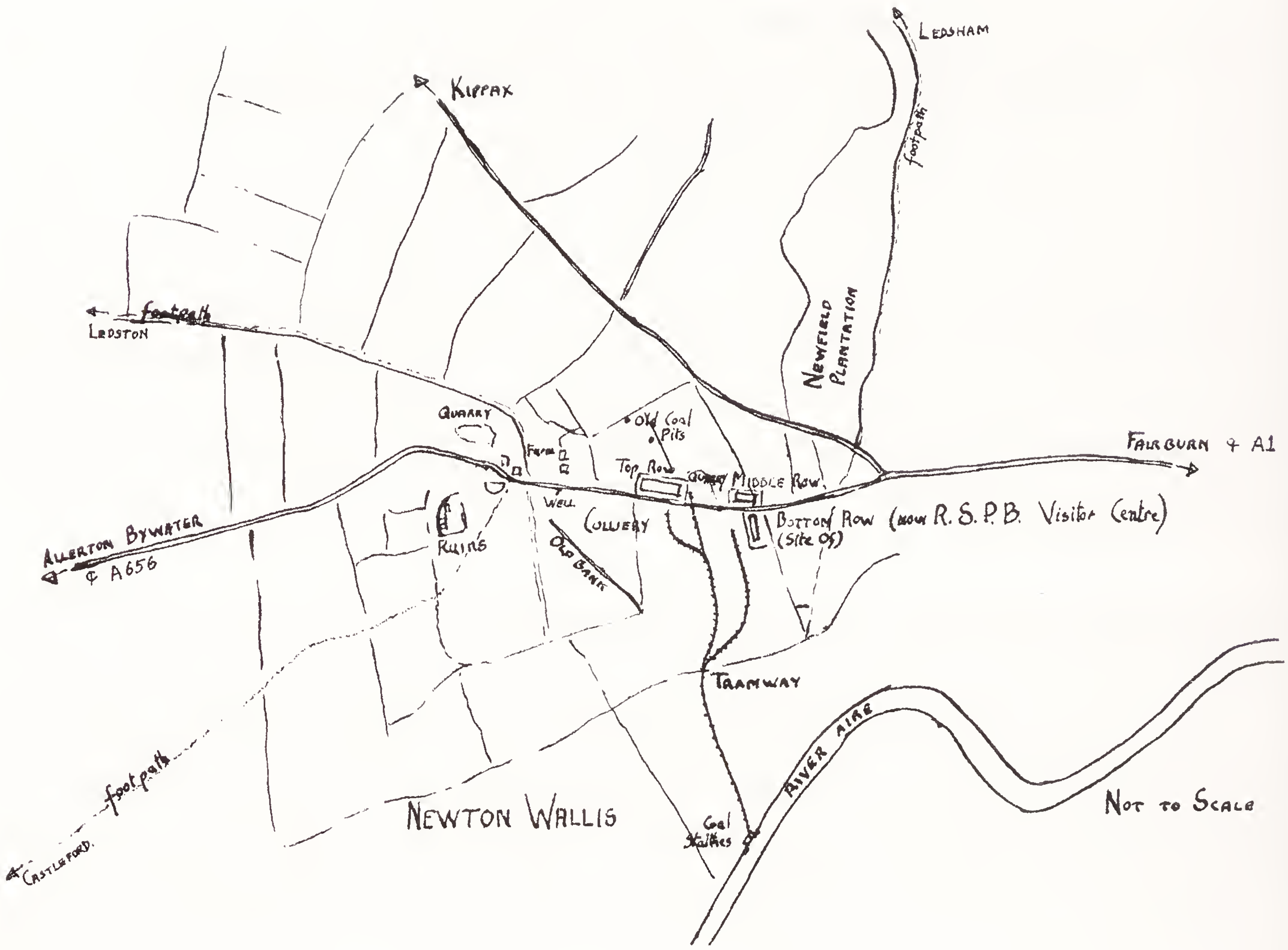

Fig. 1: Sketch map of Newton Wallis

In 1517, when Newton Wallis was said to be 'enclosed', Henry VIII was recorded as collecting tithes of £13 8s.8d. 'as part of Allerton Bywater, Newton, Castleford, Fryston, etc.'. Ownership became fragmented over the next few years. During the reign of Edward VI John and William Gascoigne were described as part owners of Newton Wallis and Wheldale, but by 1549 John Gascoigne (son of William) had sold his share to William Wharton, Edward Wharton, Richard Wharton, William Wilkinson and John Both(e), the latter being described as 'of the Manor Place or Capital Messuage'. A Deed of Partition formally tidied this arrangement up in 1550. There were numerous instances during the second half of the Tudor period of these various quarter shares in Newton being sold or inherited, some referring to a 'Mansion House or Capital Messuage', indicating the presence of a substantial house. When Edward Wilkinson and Thomas Bothe agreed to divide their moity (half) of the Manor of Newton Wallis in 1578, the deed referred to the 'new mansion house', probably a rebuilt structure on the same site, which incorporated the earlier moated, or so-called abbey, house.[2]

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[2] W. Page, ed., *The Victoria History of the County of York, vol. 3* (London, 1913; reprinted (Folkstone, 1974), p. 367; West Yorkshire Archive Service [WYAS] (Leeds), Bland Papers, DB 33/14, Deed of Partition.

This multiple ownership continued until about the beginning of the next century when there were two owners of Newton, Thomas Bland, and Anthony Wade, Wade having bought the shares of four previous owners in the 1590s and Bland of Kippax Park having acquired a lease in 1588. Wade's share was then sold by his son to John Belton for £1,050 in what seem to have been difficult circumstances, as among the deeds is one which refers to 'papers lost during the troublesome times', an allusion to the Civil War. Belton married Frances, daughter of Sir Thomas Bland of Kippax Park. The property then passed indirectly down the Bland family to one John Hartley who sold it to Thomas Davison for £3,600 on 24 March 1781. Thomas Davison had inherited Kippax Park on the death of his cousin, Anne Bland, the last of the original Bland family. Davison took the surname Bland in 1786 by Royal Licence, to become known as Thomas Davison Bland, which name the family used until the end of their occupation of Kippax Park in 1928. Another eighteenth-century local landowner with an interest in Newton was Lady Elizabeth Hastings of Ledston Hall by whose will in 1739 land in Newton was sold, along with several other properties, to fund her charitable endowment.[3]

An advertisement in the *Leeds Mercury* of 31 March 1730 gives a description of part of Newton in the Georgian period:

> To be Lett the Manor House of Newton in the Parish of Ledsham, being a large good house together with good stables, Barns, a large Malt Kiln and all other conveniences & about one hundred & fifty pounds a year in land adjoining to the farmhouse, or a greater quantity of land if desired with or without Tithes thereof. The land is Very Rich & in Good Order, well fenced and is most of it Grass Ground, but there is arable land sufficient for the farm. The Housing is all in very good repair. N.B. This farm is very fit for a Butcher, or Grazier. Enquire of Mr. Widdop at his house in Kippax

By the early nineteenth century all that remained was the farm, then known as Newton Willows.

NEWTON WALLIS AS A PIT VILLAGE

The Davison Bland family held the mineral rights of Newton Wallis throughout the nineteenth century. There may have been coal mining earlier, as 'Old Coal Pits' are marked to the north of the village on early Ordnance Survey maps. In the first half of the century demand for coal was such that it became worthwhile to look for reserves further east than the traditional mining areas of the West

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[3] WYAS (Leeds), Bland Papers, DB29/105, Newton Wallis, Sale of New Grange; E. N. Pickles, ed., *A History of Kippax*, Kippax and District Historical Society (Kippax, 2006), pp. 250-8; C. H. Medhurst, *Life and Work of Lady Elizabeth Hastings, the great Yorkshire benefactress of the XVIIIth century, together with some account of Ledsham and Ledstone, Thorp Arch and Collingham* ... (Leeds, 1914), p. 17.

Riding, where the coal measures were concealed beneath a stratum of magnesian limestone. Newton was the first mine in this part of the coalfield to be developed when Henry Briggs, one of the most important of Yorkshire mining entrepreneurs, took a lease of Thomas Davison Bland in 1838 for a period of 21 years to work several seams close to the surface and the Warren House Seam at a depth of 142 yards (about 130 metres). The mine was successful and by 1851 was producing about 46,000 tons a year, of which 20,000 were transported on the nearby Aire & Calder Navigation. This was probably its most productive period, but the mine was continued by Henry Briggs & Son for many more years after the expiry of the first lease in 1857. The shafts for the mine, situated in the small field to the west of the Visitor Centre, are now safely capped and fenced. There were two shafts, as required for safely and ventilation, a winding engine house, and several smaller buildings. A tramway was constructed to transport the coal to the canal, and also across the road into the quarry, so it seems likely that stone or lime were also moved by canal. Though the quarry has been extensively filled in, the remains of it can still be seen.[4]

By the time of the Ordnance Survey of the area, published, in 1852, Henry Briggs had built two rows of cottages for mine workers. The first, Top Row, comprising twelve houses with gardens to the front and yards to the back, was at the top of the rise to the west of the Visitor Centre, on the north side of the road. One of the central houses was the shop. The second, Bottom Row, with eight houses, was where the Visitor Centre is now. A third row of houses, Middle Row, with twelve houses, was built later, also on the north side of the road and opposite the Visitor Centre. The three rows were respectively nicknamed Heaven, Hell and Paradise by the local residents – Hell, because it often flooded; Heaven, because it was the highest; and Paradise, presumably to make up the trio. A photograph taken in the late 1950s in the front garden of a house in Middle Row shows a solid stone-built house with a panelled wooden door and a window divided by two wooden mullions with a single transom and a central upper opening sash (Fig.2). Existing aerial photographs show all the houses to have been of a similar appearance. Top Row was the first to be demolished, followed by Middle Row. Bottom Row for a short time was converted into a row of four houses, before final clearance took place in the 1960s. The residents were rehoused locally in Castleford, Ledston, Fairburn and Pontefract.[5]

The census returns for the period during which the mine was working tell something about the people who lived and worked in Newton Wallis at the time. Although the 1861 and 1871 censuses do not list Newton Wallis as a separate hamlet,

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[4] Graham Hudson, *The Aberford Railway* (Newton Abbott, 1971), p. 88; John Goodchild, *Adventures in Coal: the beginnings of the coal-mining firm of Henry Briggs, Son and Co. in Yorkshire, c.1826-1890*, British Mining, 66 (Northern Mines Research Society, 2000), pp. 10-12.

[5] Personal communication from Steve Wadsworth of Fairburn; *Ledsham Fayre Brochure* 1988.

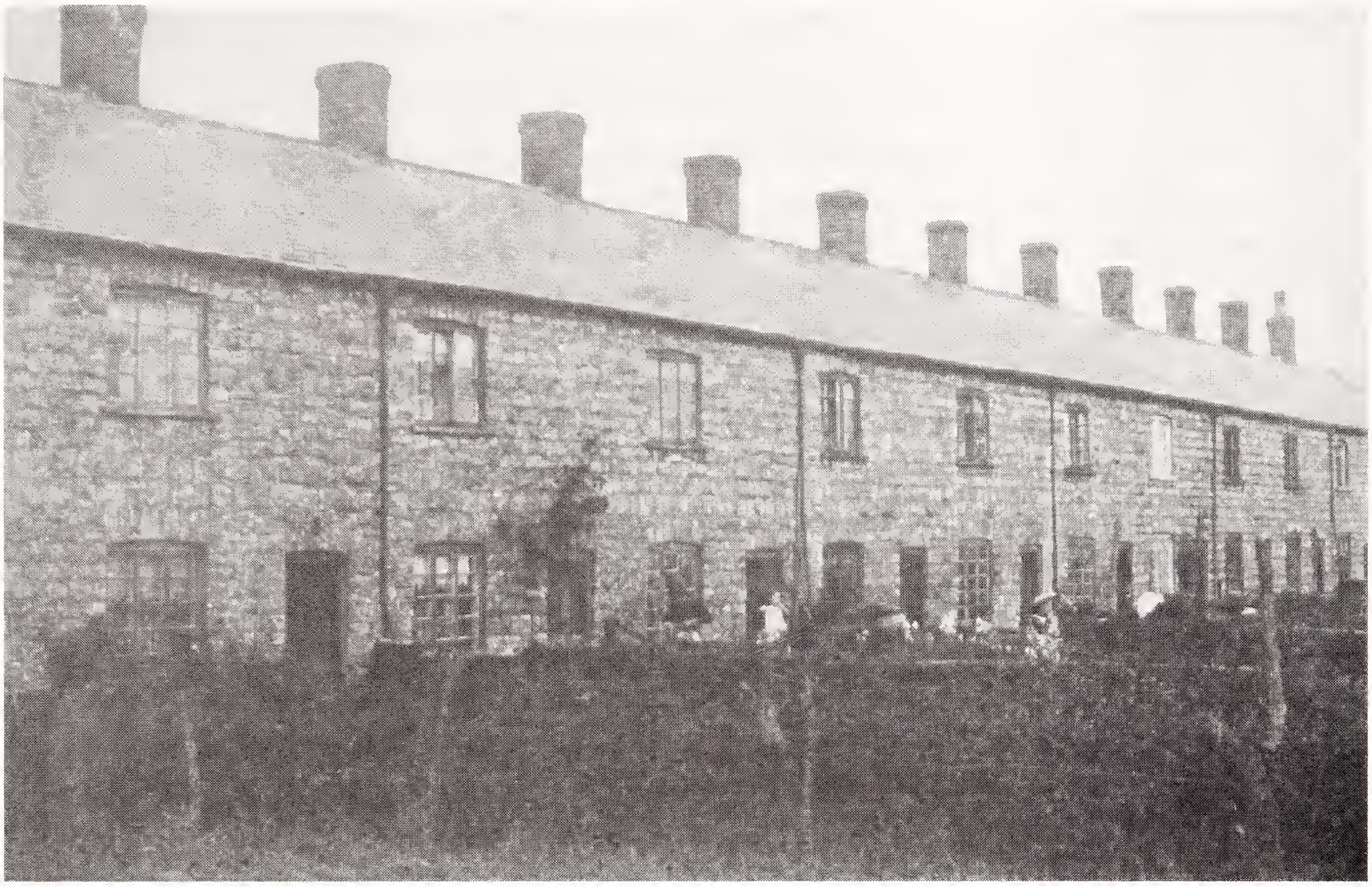

Fig. 2: Middle Row (Paradise) (photograph, Ann Needham)

by comparing entries with other years it is possible to identify some of the Newton Wallis households. Edmund Parker was the major landowner and farmer, farming 375 acres (156 hectares) and employing nine labourers. Most of the workers in Newton were employed in either agriculture or coal mining. As well as coal miners, there were surface workers, including an engineer, Mr. Carter, a colliery fireman, a banksman, a machine engineer, and also a stonemason. By 1861 the workforce had expanded to include a colliery bookkeeper, and a bootmaker living in the village. In 1871 Edmund Parker had increased his workforce to ten labourers and two boys. There was a Colliery Manager living in the community and also an underground Steward at the mine. A school had been started, with Sarah Hepworth recorded as Infant School Mistress. The school used one of the pit buildings, presumably one of the early ones no longer required. The total population of Newton was about 116 persons, living in approximately twenty-seven houses. Many of these people were locals, but some had travelled long distances, one from as far away as Surrey.[6]

[6] HO107/2329, ff. 219-224, pp. 13-22; (Newton, 1851 Census); RG9/3431, ff. 118-127, pp. 1-19 (Ledsham, including Newton, 1861 Census); RG10/4739, ff. 4-11, pp. 1-15 (Ledsham, including Newton, 1871 Census); RG11/4712, ff. 8-9, pp. 9-12 (Newton, 1881 Census).

The Trade Directories of the nineteenth century, tell us a little more about Newton at this time. Newton Wallis was always listed as part of Ledsham in which parish it was situated. The earliest entry seems to be that in White's *Directory* for 1837, which refers to 'Newton Abberth or Newton le Willows' as a 'small hamlet'. Twenty years later Kelly's *Post Office Directory* gave more details. It listed Henry Briggs as the colliery owner; David Goodson, as the colliery agent, and Edmund Parker as a farmer and shopkeeper. Ten years later in 1867, Newton has gained a separate shopkeeper. Edmund Parker was now just a farmer, and William Parker was the colliery agent. By 1877 the village was described as a hamlet with a colliery and chapel. In a more detailed entry in *Kelly's Directory of the West Riding,* 1893, Newton was still referred to as a hamlet, with its chapel, and a Church infant school for thirty children: average attendance of twenty. Miss Anne Wallace was the schoolmistress and the school was supported by Thomas Davison Bland. There were now two shopkeepers, Isaac Clegg and John Robinson. A similar entry for 1897 showed three shopkeepers, Edward Blower, Isaac Clegg and Mrs. Jane Robinson.[7] This probably measures the height of the hamlet's prosperity, though it should be remembered that often a shop could consist of little more than a sideboard or cupboard in a room in a house. By 1904 there are indications of decline: Edward Blower was the only shopkeeper. Communication with the wider world was enhanced with the announcement of a wall letter-box, cleared at 8.45 a.m. on weekdays, a welcome alternative to having to post letters in Fairburn, Ledsham or Castleford.

The older children went to school at the Lady Elizabeth Hastings School in Ledsham, about half-an-hour's walk away. A short history of the school mentions Newton (Wallis) several times with less than flattering references to a number of children from Newton being admitted in a demised state of ignorance. Attendance was always a problem, with many absences for reasons, good and bad. In 1888 there was an epidemic of measles with scarcely a house in the village unaffected. The school attendance committee had the parents of the most incorrigible irregulars summoned. On one occasion more than a score of the children were absent, attending a tea given in connection with the Methodist chapel at Newton, especially galling as the school was Church of England. A large number of the children from Newton had to leave school in the November when their parents were turned out of their houses as a consequence of a strike at Fryston Colliery which had been going on several months. A sequel to this was the arrival of the children of strike-breakers from the Black Country who had lately come to reside at Newton and exhibited a deplorable state of ignorance: not one knew their multiplication tables. References of this kind continue in the history of the school: 'most of Newton children away, measles present there'; 'most of Newton children left owing to parents moving to Castleford and other places'. It was obvious that the Newton children would continue to attend badly unless they were seen by the School Attendance Officer. Many of the miners at Newton had to cross the river Aire by boat but the river was occasionally swollen and impossible to cross. Newton children were again absent owing to the annual tea at the chapel; mumps and measles were again prevalent. The Newton children were then recorded as having left owing to Mr. Bland of Kippax Park refusing any longer to let the cottages belonging to the colliery company. The Allerton Coal Co. bought a row of the houses at Newton but the children now admitted from Allerton Bywater were judged not fit for Standard I.[8]

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[7] *The Post Office directory of the West Riding of Yorkshire, with the city of York* (London 1867), p. 497; *Kelly's directory of the West Riding of Yorkshire,* 1893 (London, 1892), p. 646; *Kelly's directory of the West Riding of Yorkshire,* 1897 (London, 1897), p. 724.

The chapel at Newton dated back to 1834 when William Clegg, son of Sarah Clegg who had been converted by Wesley himself in 1772, took a farm in Newton and turned the largest room in his house into a Methodist Chapel. Here services were regularly held for eleven years until the arrival of a new squire effectually closed the place. Edmund Parker, the Newton farmer and a Methodist, then converted his granary into a Methodist chapel, and for over sixty years, under three generations of Parkers, Methodist services continued to be held there. The barn referred to has recently been restored and converted into a large house.[9]

THE SURFACE ARCHAEOLOGY OF NEWTON WALLIS

Although Newton is not quite a lost village, there are now only four houses inhabited (Fig. 3), but remnants survive of the larger settlement of former times. Newton was once the centre of a manor, though only traces survive of the medieval manor house referred to in the records. The large piece of limestone ashlar masonry almost hidden in the vegetation on the island in 'The Moat' is thought to be from the house (Fig.4), and, though the rest is permanently under water now, the early Ordnance Survey shows this not to have been the case in the earlier nineteenth century. The house was probably abandoned due to flooding, the maps showing the land to the south, west, and east, as 'subject to flood'. They also show an 'Old Bank' to the east of the 'Moat' which may have been built as a flood defence at some time in the past. The 'Moat' is almost rectangular in plan, with the longest sides to the north and south, with several squares inside it and a spring on the north-east corner, which may have served to maintain the water level in the moat. Lorenzo Padgett's *Castleford and District, in the Olden Time* shows the remains of what he calls Newton Priory, with traces of window and door openings to be seen in the ruins. The name Newton Priory was also used in *Yorkshire Notes and Queries*, but the name appears to rest on a romantic misunderstanding of the word 'abbey'. The modern Ordnance Survey map perpetuates the error. In his *History*

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[8] Barry Bennett, 'The Old School, Ledsham' (unpublished, copy with author); Barry Bruff, ed., *The Village Atlas: The Growth of North & West Yorkshire 1840-1910* (London, 1990), p. 95.

[9] Lorenzo Padgett, *Castleford and District in the Olden Time* (London, 1904), p. 269.

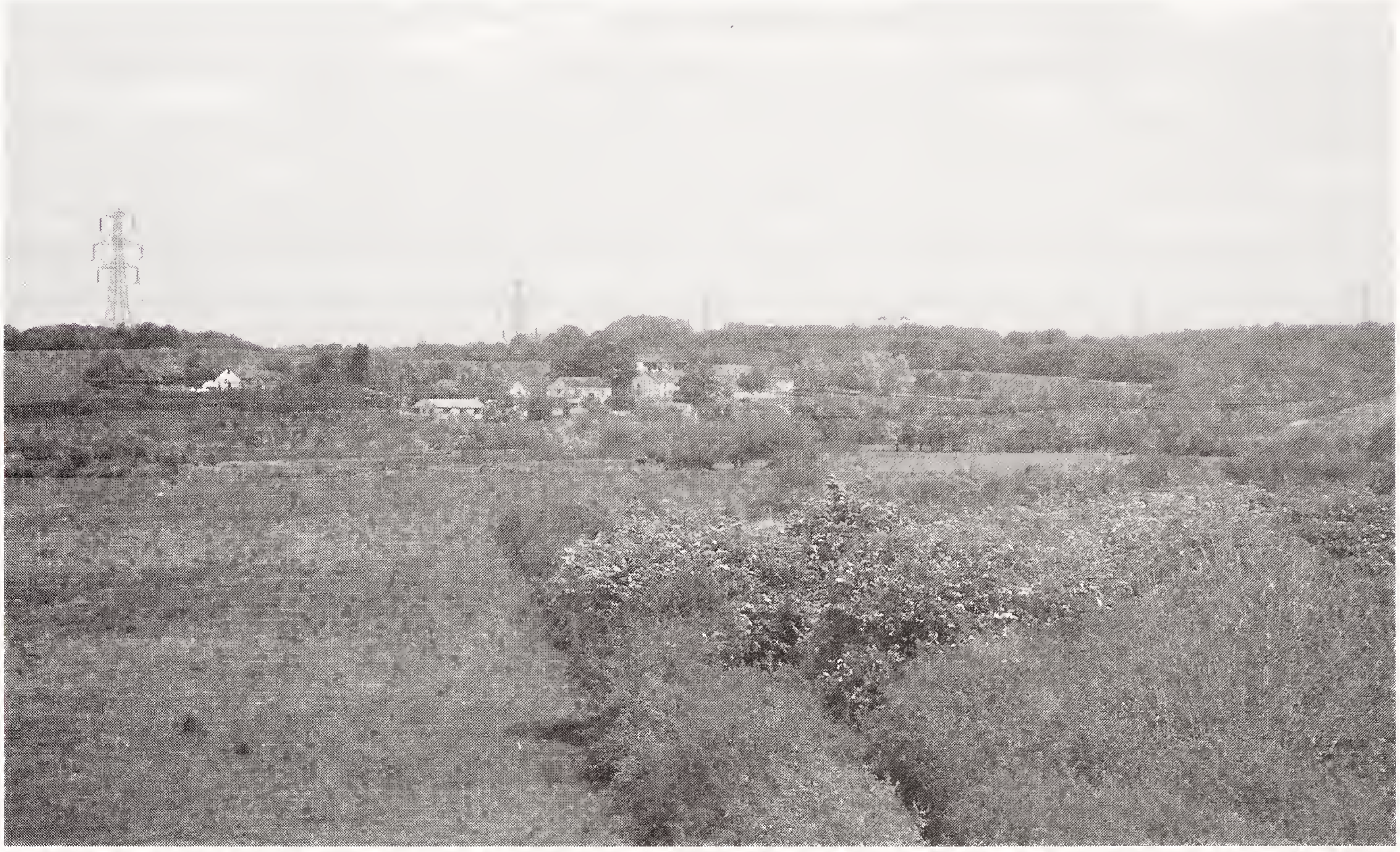

Fig. 3: Newton Wallis from the south, 2009 (photograph, author)

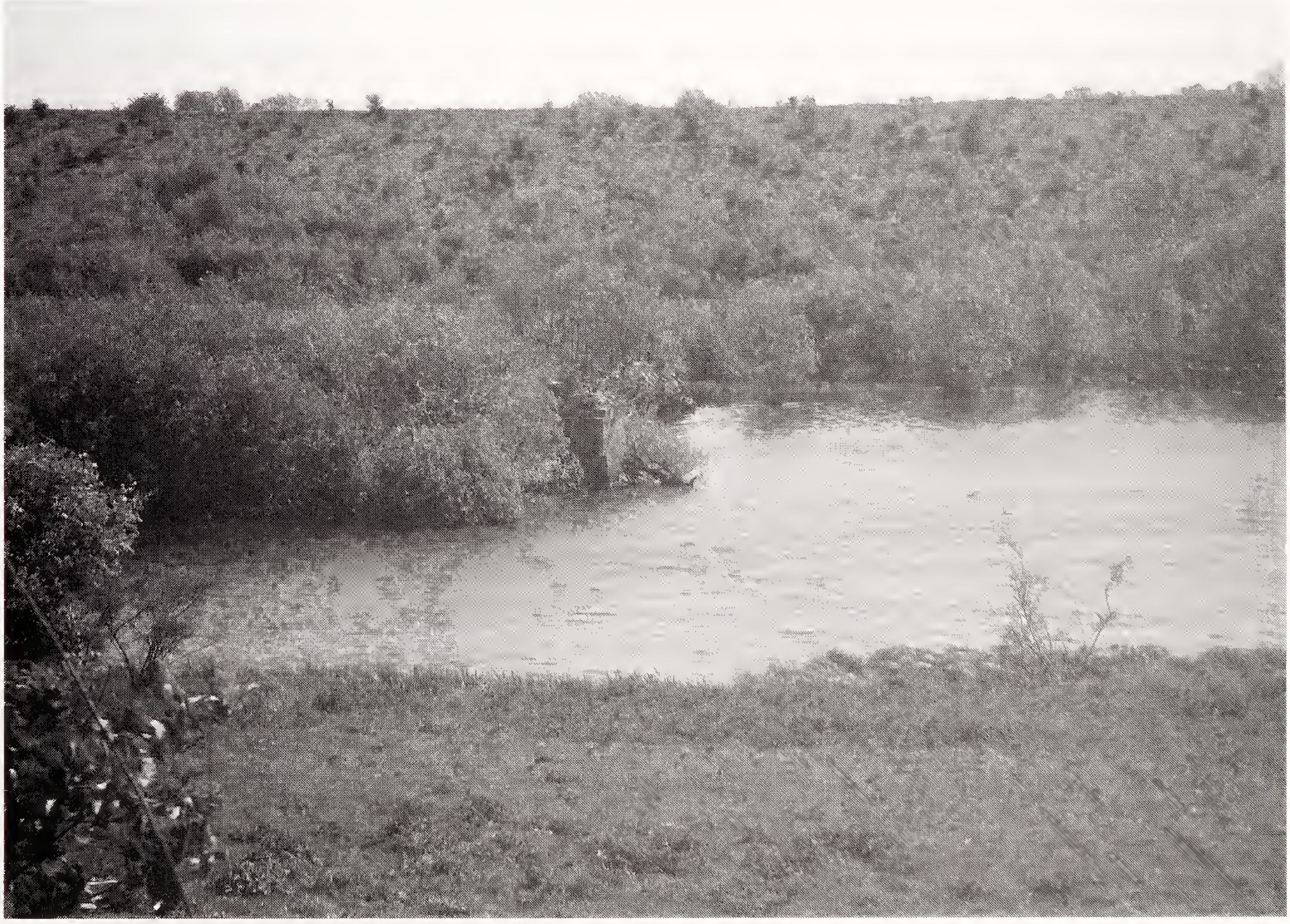

Fig. 4: The Moat from the north, 2009 (photograph, author)

of Castleford, written in the 1860s, Samuel Johnson calls the remains 'Newton Abbey' and produces a long and complicated explanation with little or no evidence, but he does give a useful description of the ruins as they then stood. His size for the site corresponds with that given by others. He found it covered with heaps of rubbish but the outline of the foundations could be traced even though there were fruit trees growing amongst it all. The largest piece of standing masonry was about 50 feet (15 metres) long, rising to about 17 feet (5 metres) at each corner from a base moulding, and there was evidence of a doorway and windows which he described as 'not more than' a foot wide (0.3 metres) and 5 feet 2 inches (1.75 metres) high, with a square-headed trefoil or shoulder arch. This architecture is clearly traceable to the twelfth century. The masonry is superior, strong and massive, composed of large blocks of well-squared stone, both externally and internally. The thickness of the walls was 5 feet 6 inches (1.8 metres). He stated that there were other remains indicating their religious character, but there seems to be no documentary evidence to support his conclusion. [10]

It not known when the Manor House was abandoned, but the later houses built on the higher ground in the bend on the road at the western end of the village appear to incorporate masonry from the structure. A detailed survey of the old farm and the large barn in 1999 found pieces of medieval masonry incorporated in the farmhouse and its outbuildings. One building, used for a time as a piggery, contains a chamfered window which is possibly seventeenth-century. The farmhouse roof has nineteenth-century king post roof trusses, but they may be replacing an earlier roof. A small barn nearby appears to be of the seventeenth century and the large barn is said to be 'possibly a manorial barn associated with the moated Manor House'. One intriguing feature of this group of buildings is the short row of circular-section columns supporting one side of an outbuilding. It seems perfectly reasonable to think that some or all of these buildings used stone from the old manor house.[11]

If the principal medieval building were not an abbey or a priory, an alternative explanation for its name might be that offered by Bertha Lonsdale in 1960. She pointed out, in an article in the local newspaper, that in Old Scandinavian 'a' is a river or a stream, and 'by' is a village or homestead, so the word 'abbey' may be a corruption of the Old Scandinavian for 'a-by', meaning a homestead on a stream. There is in fact a place in Lincolnshire midway between Louth and Alford, which is called Aby.[12]

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[10] C. F. Forshaw (ed.), *Yorkshire Notes & Queries, vol. 1. being the antiquarian history of Yorkshire* (Bingley, 1905), p. 278; Samuel Johnson, 'The History of Castleford', *Castleford Magazine* (1861), 18.

[11] West Yorkshire Archaeology Advisory Service, Sites & Monuments Record, 732: Newton Wallis.

[12] *Pontefract and Castleford Express*, 18 Mar. 1960.

THE TRANSFORMATION OF NEWTON INTO A NATURE RESERVE

Newton village became almost deserted after the demolition of the last row of cottages in the 1960s, only Priory Cottage and the house at the former Dandibrush Kennels remaining inhabited. The large farmhouse stood empty until it was demolished in 2009. The RSPB took over the reserve in 1976, and Steve Madge was appointed the first warden to live on the reserve with a house in the village of Fairburn, but not until the RSPB Visitor Centre, opened in 1979, was extended in 1983 were voluntary wardens and workers on the reserve able to stay overnight in Newton, making them the first new – albeit only temporary – inhabitants for many years.

The rebirth of the former pit-village as a nature reserve was due to one of the site's greatest problems over the years – flooding from the nearby River Aire. For over a hundred years it had been noticed that some areas in Newton and Fairburn were becoming increasingly liable to flood and by the 1920s, with mining subsidence, these parts had become permanently flooded. For many years it was still possible to see the old field boundaries, as the tops of the fences were visible just above the water level. It was in the 1950s that R. F. Dickens, Dr. J. D. Pickup and many others began efforts to get the area designated as a nature reserve. They were successful and Fairburn Ings Nature Reserve became the third such area in the country to be so designated. It stretches from near the old Al in the east, to the A656 in the west, and north from the river Aire to the road from Allerton Bywater to Fairburn. During the years 1983 to 1985 there was extensive tipping in the south of Newton on the space between the village and the river when the spoil heaps of Allerton Bywater Colliery were washed to provide coal for use in the nearby electricity generating stations. These spoil heaps on the reserve were finally shaped to their present appearance in 1996 when much spoil was brought from the new Gascoigne Wood Colliery. The total area of the reserve is, of course, greater than Newton itself, taking in also parts of Fairburn and Ledsham parishes. In October 1984 the reserve was designated a Site of Special Scientific Interest, and the purpose-built Visitor Centre was opened in time for Easter 2000.

The future is uncertain, though, as new plans have been put forward for open cast mining near the site which would transform the landscape yet again.[13]

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[13] *Opencast News*, 2 (Nov. 2006), p. 1; www savefairburnings.org.uk (accessed 14 Jan. 2010).

DANELAW CENTRE FOR LIVING HISTORY AT THE YORKSHIRE MUSEUM OF FARMING, MURTON PARK, YORK.

By Mike Tyler

This Communication draws attention to the implications of the proposed changes to the National Curriculum for the teaching of History in primary schools, which will become statutory from 2011. It then draws attention to the need for museums and heritage sites to respond to this, and outlines the facilities offered for learning outside the classroom by the award-winning Danelaw Centre for Living History at the Yorkshire Museum of Farming, Murton Park, near York.

For all those with an interest in future generations of historians and archaeologists, the proposed framework for the new National Curriculum for primary schools is a matter of some significance. Devised following the Rose review of primary education, and published in 2010, the new curriculum takes a fresh look at the way in which children are educated, making some sweeping recommendations regarding the ways in which subject matter is taught, the key skills which are to be imparted, and the ways in which learning is to be organised.

The structure and content of the curriculum is not just of interest to schools and parents. It is also of critical importance to the numerous museums and heritage sites for which revenue from school visits has become an increasingly crucial source of income. Many are so dependent on this source of income that without it, the ability to retain paid professional staff, or in extreme cases cover basic operating costs, would be impossible. The good news for all heritage sites therefore is that History has retained an important place as one of six key 'areas of learning' within the new curriculum, embedded as 'Historical, Geographical and Social Understanding'. Although much detailed work remains to be done by schools to develop their own specific approaches to delivering the curriculum, indications are that teachers will exploit the scope offered to include more local history content to run alongside, or to provide additional focus for, well-established topics such as invaders and settlers, and life in the Second World War. The challenge for the heritage sector is to look afresh at its education programmes to ensure that they meet the needs of increasingly hard-pressed teachers.

The Yorkshire Museum of Farming at Murton Park on the outskirts of York is an example of an independent, niche museum which has developed an award winning programme of living-history activities aimed at primary schools. Under the brand of The Danelaw Centre for Living History, the museum has, since 1992, been able to exploit its location and the resources of the site to offer programmes of activities which have been adapted over the years to fit with the national curriculum as it has evolved. The changes recommended by the Rose review are therefore just the latest chapter in a continuing story, and the staff are currently reviewing the content of all their programmes to ensure that they will continue to meet the needs of client schools. Murton Park does have advantages which some other heritage centres do not share. The fourteen-acre site has been developed over the years to include reconstructions of a first-century Roman auxiliary fort, a Saxon/Viking village, a Tudor farm croft and a Second World War evacuee centre, all of which are used by parties of school children throughout the year to experience hands-on what life was like 50, 500, 1000 or 2000 years ago. The centre, with its educational philosophy of 'I hear and I forget, I see and I remember, I do and I understand', is therefore well placed to exploit the scope which the new curriculum opens up for fresh approaches to learning.

For more information on the proposed national curriculum, visit: http://curriculum.qcda.gov.uk/

For more information on the Danelaw Centre for Living History, visit: www.murtonpark.co.uk

OBITUARIES

MRS KATE M. MASON (1914-2006)

By the passing of Mrs Kate Mason (*née* Harbutt) the county has lost one of its most widely respected topographers and local historians. Born in Bradford, Mrs Mason studied agricultural botany and dairy science at the University of Leeds, marrying Tom Mason, an Addingham farmer, in 1941 and settling at the family farm, Reynard Ing, a laithe house. There she worked as a busy farmer's wife, raising a family of three daughters and practising the domestic skills of baking, preserving, sewing, and gardening, as well as beekeeping. At the same time she extended her knowledge of farming, its tools, practices, history and buildings, putting to effective use her academic scientific training in observation and classification. She also found time for occasional journalism.

In 1968, Kate Mason decided to enter a competition organised by the *Farmers' Weekly*, submitting an essay in which she described the evolution of the Masons' own farm, its setting, fields, and farm buildings. The judge was the very distinguished historian, Dr W.G. Hoskins, who described Mrs Mason's entry as 'admirable'; it was published in *History from the Farm* (1970), a collection of the most successful essays, edited by Hoskins. That essay showed all the qualities found in Kate Mason's later writings: it was logical, clear, succinct, with controlled detail and coverage. Perhaps not surprisingly, success in the competition proved to be the stimulus for her later activities in adult classes and societies, and in research, recording and writing.

Naturally, farming lay at the root of some of Mrs Mason's work, continuing her contributions to the *Farmers' Weekly* but also publishing articles on such aspects of rural folk life as cheese making, the role of visiting Irish farm labourers, and the use of barns in Craven. She had a keen interest in sheep breeding and was honorary president of the Wensleydale Long Wool Sheep Breeders Association. Among other societies enjoying her active support were the Addingham Civic Society and the Society for Folk Life Studies. Having herself attended various adult classes, she then successfully taught local history for the WEA in Craven. Moreover, Kate Mason made valuable contributions to two of the county's most notable historical and archaeological societies. In the Yorkshire Archaeological Society she represented the Olicana Historical Society on the Council from 1992 to 2002; her interventions during Council discussions, though sparing, were always pertinent, clear and full of common sense. For the Olicana Historical Society itself, at various times she was involved in organising the lecture programme, excursions -- and the Christmas party. Such practical assistance with local societies is an important, if underestimated, contribution to the study of the past, and in the case of Kate Mason two other aspects of her activities deserve mention: she was always selflessly generous in sharing information with others; and her lively, serious participation was recognised by invitations to give lectures or advice, and to contribute to publications, of which one of the first was a *History of Lothersdale*, edited by Kenneth Wilson (1972).

To continue and extend her researches and writing, Mrs Mason mastered the necessary techniques, absorbed general works and undertook the patient study of a multitude of primary sources in manuscript and print. Her labours bore fruit in a variety of directions: a transcript of the Addingham parish register for the earlier nineteenth century; fieldwork and written contributions for *Yorkshire Boundaries* (1993); the compilation with others of *Addingham: Glimpses of the Past* (1993), a collection of historic photographs; the supply of material on people, buildings and maps for a Mid-Wharfedale local history research group. Her enthusiasm for fieldwork led her to take part in the investigation of archaeological sites near the family farmstead. An active member of the Yorkshire Vernacular Buildings Study Group, Kate Mason was frequently engaged in the identification and recording of a wide range of vernacular buildings (both for their own sake and in the cause of conservation), from cottages, farms and barns to workshops, sawmills and drying kilns; the records made are of lasting value, and it was fitting that in 2008 three of her fellow recorders published with the local Civic Society *Addingham: A View from the Moorside*, a collection of essays continuing architectural and topographical studies initiated by Mrs Mason.

Although much of her work was on the agrarian history of Craven, Kate Mason's two most substantial publications reveal her wider interests and knowledge. In *Woolcombers, Worsteds and Watermills* (1989) she traced the history of the local textile industry from the domestic system of manufacturing to the development of water power and the establishment (and ultimate demise) of the mills, carefully set in the context of local society. Following that study, she published in 1996 Addingham from Brigantes to Bypass, an impressive general local history, thorough and informative, with coverage which includes the twentieth century.

Mrs Mason was an accomplished local historian who produced well-researched, carefully written, firmly directed publications which draw on a clear sense of the past as well as an experienced understanding of the life and traditions of rural society. Friendly, helpful, modest and quietly determined, Kate Mason showed in her work a clear integration of approach, methods, and commitment to her own countryside, reflecting perhaps her response to the motto on the family house, taken from the book of Job: 'Speak to the earth, and it shall teach thee'.

G.C.F. FORSTER, Senior Past-President

DR K. J. ALLISON (1930-2009)

We regretfully record the death in November 2009 of Dr Keith Allison, who made important contributions to the history of the East Riding of Yorkshire. Keith Allison was born in Norwich and attended the City of Norwich School before proceeding to the University of Leeds where, under the influence of two of his tutors, M.W. Beresford and G.R.J. Jones, he developed a keen interest in historical geography, notably in the history of the landscape, a subject which fitted well with his already developed hobby as a naturalist. After graduation he undertook research for a Ph.D. before serving as an education officer in the R.A.F. for two years. He joined the staff of the *Victoria County History* in 1957, first as assistant editor for the large volume on the city of York, then as senior assistant to the History's general editor at the Institute of Historical Research in the University of London. In 1964, Dr Allison returned to Yorkshire as county editor for the planned *VCH* of the East Riding, remaining in that appointment until his retirement in 1990.

As county editor Keith Allison was responsible for the publication of six large volumes: one each on Hull and Beverley, and four on parishes of the East Riding. It was an impressive achievement, made possible by Allison's abilities as an editor, researcher and author. A well organised scholar, firm of purpose and skilled as a writer of clear prose, he had the art of dealing firmly, but fairly and pleasantly, with other contributors to the volume (even with the laggards). His productivity was much admired by colleagues in the *VCH* as well as by historians elsewhere.

If the *VCH* of the East Riding – the six 'big red books' – are (inevitably) Dr Allison's main legacy, it should be remembered that he made other significant contributions to the study of Yorkshire's past. As a member of the Yorkshire Archaeological Society he served on the Council from 1964 to 1982 and was also on the Record Series Committee for several years, making sound comments on editing problems and the value of texts proposed for the Series. To various local bodies he gave crystal clear lectures, spiced with wry, but sometimes puckish, humour. For some years he was one of the judges for the Yorkshire History Prize essays, assessing each entry strictly but fairly. He was a long-standing editorial adviser for *Northern History*. In addition, he gave lengthy service as editor of the East Yorkshire Local History Society's publications, contributing two booklets to the series himself. Above all, drawing on his command of topographical data, in 1976 he published *The East Riding of Yorkshire Landscape*, a masterly, highly readable volume in an important but uneven series of regional landscape histories regrettably dropped by the publishers before the whole of Yorkshire could be covered.

Moreover, Dr Allison's historical writings were not confined to Yorkshire. For his first degree he presented a dissertation on the lost villages of his native Norfolk, a study of which a version was published in the county journal, something of an achievement for an undergraduate. Then came his highly regarded Ph.D. thesis on the rise of the Norfolk worsted cloth industry in the sixteenth and seventeenth centuries, a major work, parts of which appeared in historical journals. The author of contributions to the *VCH* for Warwickshire, he also demonstrated continuing interest in deserted medieval villages. He wrote a short, general book on the subject for students and the reading public, and he was a joint author (with Maurice Beresford and John Hurst) of monographs on the lost villages of Oxfordshire and of Northamptonshire.

In retirement, Keith Allison remained an enthusiastic gardener – he tended an allotment at Cottingham for some forty years – and a keen birdwatcher. He and his wife travelled the world to see birds; he claimed 2629 species observed; and he published a visitor's guide and bird list for a local birding spot near Beverley. Latterly, he extended his interest in the world of nature to fungi, bees, ladybirds and moths.

Keith Allison was always willing to help serious enquirers, and he stood for high standards of work and commitment. His accomplishments made him a significantly distinguished figure in the field of local history and topography: a true scholar and a gentleman.

G.C.F. FORSTER, Senior Past-President

JOHN TAYLOR (1925 – 2009)

The death of John Taylor on 25 April 2009 is a grievous loss to all historians of medieval Yorkshire. John was an outstanding teacher and research scholar of the University of Leeds School of History for over forty years. Born in Lancashire on 22 August 1925 and educated at Bolton Grammar School (1936–43), John never altogether abandoned his affection for his native county. Nevertheless, immediately after his appointment as Lecturer in History at Leeds in 1950, he became one of those many Lancastrians who have proceeded to flourish on the eastern side of the Pennines. By then he had in fact already spent a long period of military service in India (about which he rarely if ever spoke), and then three years (1947–50) as a history undergraduate at Balliol College, Oxford. John remained loyal to Balliol to the end of his career although always and characteristically modest about his university attainments. Nevertheless, Miss Barbara Harvey, his fellow student, still recalls that he was regarded as the ablest medieval history undergraduate at Oxford when he became Proxime Accesit to the Gibbs History Prize in 1948.

It was probably inevitable that John Taylor soon fell under the powerful influence of the charismatic Vivian Galbraith, who had just taken up the Regius Chair in History at Oxford. The latter converted John to what was to become a life-long dedication to the analysis of medieval English chronicles. That subject suited John's many talents to perfection for he combined exceptionally accurate textual scholarship with a flair for extracting significant meaning from even the most intractable historical document. As soon as he joined the ranks of the Leeds University historians John accordingly applied Galbraithian principles to the previously much neglected topic of historical writing in Yorkshire chronicles. His first venture in the field was an edition, published by the Thoresby Society in 1952, of the so-called long and short chronicles of Kirkstall Abbey, originally written within what are now the suburbs of Leeds itself. More general in scope was John's pioneering paper of 1961 on *Medieval Historical Writing in Yorkshire*, a lengthy essay which proved that he had no rival as an expert in the field of northern medieval chronicles. A much more dramatic testimonial to the range of John Taylor's learning was a comparatively small book on a huge subject, *The Universal Chronicle of Ranulf Higden*, published by the Oxford University Press in 1966 and the first lucid analysis of what John described as 'the most popular world history of medieval England'. Soon thereafter he published two papers based on the complex early manuscripts of the *Modus Tenendi Parliamentum*; and he retained an interest in English parliamentary history to the end of his career.

But then few topics in history, and especially northern history, failed to interest John Taylor. Thus his two papers on 'The Plumpton Letters, 1416–1552' and 'The Diocese of York and the University Connexion, 1350-1520' (in *Northern History*, 1975 and 1989) were original pieces of interpretation conducted on two very different fronts. Less to be expected was John's intense and lasting enthusiasm for the elucidation of the notoriously ambiguous Robin Hood 'ballads'. As his partner in a joint enterprise which reached fruition in a collection of these ballads, namely *Rymes of Robin Hood: An Introduction to the English Outlaw* (published by William Heinemann Ltd in 1976), I collaborated with him very closely. As John's other colleagues and collaborators would all agree, it was quite impossible to imagine having a serious personal conflict of opinion with him. Nothing could be further from John's ideal of courteous unembittered debate. In that and other respects he personified many of the virtues expressed most famously by Chaucer: he was indeed a 'verray, parfit, gentil knight'. Such certainly is the impression which emerges from the pages of *Church and Chronicle in the Middle Ages*, edited by his Leeds colleagues, Ian Wood and G.A. Loud, and presented to John by his many admirers in 1991.

Although an exceptionally modest scholar and largely devoid of personal ambition, John Taylor, never hesitated to place his skills and talents in the service of others. For nearly twenty years (1962–80) he served the Leeds Philosophical and Literary Society as a member of its Council, and as President and Editor of its Proceedings. He was Hon. General Editor of the Yorkshire Archaeological Society's Record Series for five years in the 1980s; and it was during those years that his many services to the Society reached a climax when he became its President between 1984 and 1989. Meanwhile John's loyalty to his colleagues in the Leeds School of History (of which he was Chairman from 1979 to 1982) was as pronounced as ever. Nor, after his retirement in 1989, did he ever falter in his enthusiasm for the study of medieval English chronicles. His erudite and comprehensive *English Historical Literature in the Fourteenth Century*, published by the Clarendon Press, Oxford, in 1987, had already established itself as his magnum opus; but his final textual and editorial researches, conducted over many years in collaboration with Wendy Childs, were dedicated to the chronicles of St Albans and may well prove to be the most enduring of John's many bequests to future scholarship. His final legacy is of an unforgettable scholar who (to quote Chaucer yet again) 'loved chivalrie, truth and honour, freedom and courtesie' and was dedicated above all else to historical scholarship in Yorkshire and to his wife, Ella, to his sons Richard and Donald and to the other members of his family.

Barrie Dobson

BOOK REVIEWS

LADY ANNE CLIFFORD: CULTURE, PATRONAGE AND GENDER IN 17th CENTURY BRITAIN. Edited by KAREN HEARN AND LYNN HULSE. Yorkshire Archaeological Society Occasional Paper 7 (2009). Pp. 139 (A4 paperback). £20 + £4.50 p&p. ISBN 1-9035-6475-1.

The essays in this collection explore Clifford's construction of monuments, music practices, architectural choices, collecting activities, and her relationship with books. As such it is a rich survey of Clifford's active and diverse engagement with the material culture of the seventeenth century. The first essay in the book, Karen Hearn's description of Clifford's 'Great Triptych', usefully situates this painting within contemporary trends in memorial portraiture. Hearn also places this work amidst portraiture of the period more broadly, identifying several paintings that may have contributed to the final composition of the 'Great Tryptych'. Elizabeth Chew's essay surveys the material goods which were a part of Clifford's strategy for self representation. She makes a strong case for identifying Anne Clifford as a participant in the cultural practice of collecting rare objects. At the same time she notes Clifford's use of material objects to assert the importance of matrilineal connections.

Many of the essays make extensive use of primary manuscript and early print sources. This is certainly true of Adam White's discussion of monuments designed or commissioned by Clifford. In this essay he clears up certain misunderstandings relating to the Spenser and Drayton monuments. He identifies likely print and material sources that influenced Clifford's designs. He also provides a detailed survey of her family monuments. John A. A. Goodall gives a reassessment of Clifford's architectural choices, discussing her motivation for building in what would appear to be an anachronistic style. He asserts that her choices were in keeping with the active dynastic message she wished to convey, and points out that her building strategies were practised by many noble families of the early-modern period. He argues that the elements of her architectural schemes that are now viewed as medieval may have been seen by her contemporaries as 'classical'. Lynn Hulse's essay completes the discussion of Clifford's artistic practices. She explores Clifford's musical influences and places her within the musical traditions of the noble household.

The last three essays examine Clifford's participation in book and print culture. Heidi Brayman Hackel's essay, drawing upon her work on women readers in the early modern period, sets Anne Clifford within the context of female book ownership and explores her relationship to the material object of the book, as well as her reading practices. Especially engaging here is the way in which Hackel moves the broader discussion of the books Clifford owned to a more focused engagement with one particular book, *Barclay his Argenis*. The following essay by Stephen Orgel is well placed to engage with the issues raised in Hackel's essay, as it provides a more detailed exploration of Clifford's relationship with a single book, *A Mirrour for Magistrates*. Orgel's essay surveys Clifford's commentary within this text, noting that Clifford marks moments of personal relevance with her own commentary. In the final essay, Katherine O. Acheson seeks to re-engage with Clifford's autobiographical writing through the use of linguistic theory. Her discussion highlights important textual qualities of Clifford's texts that have been overlooked. She situates these qualities within contemporary practices found in books that combine images with text.

Many of the essays are generously illustrated in a way that supports and enhances the discussions. However, the inclusion of an introduction would have helped situate the reader from the outset and allowed the contributors an opportunity to communicate their shared view of Clifford's practices and interests. This is a useful collection of essays that provides a greater sense of what was clearly Anne Clifford's wide-ranging interest in seventeenth-century material culture.

University of Huddersfield Jessica Malay

ARCHBISHOP THOMSON'S VISITATION RETURNS FOR THE DIOCESE OF YORK, 1865 Edited by EDWARD ROYLE AND RUTH M. LARSEN. Borthwick Texts and Studies 34, York: Borthwick Institute for Archives, University of York, 2006. Pp. lxvii + 571. Price (hardback) £55.00. ISBN-13 978-1-904497-17-2.

Like other conscientious bishops, William Thomson, archbishop of York from 1862 to 1890, conducted regular visitations of his diocese, normally at triennial intervals. As a preliminary to the process, questionnaires were sent out to all the parochial clergy to collect information on a range of matters relating to their personal situations and pastoral responsibilities. The resulting forms are underutilised sources, but they frequently provide vivid insights into the social as well as religious lives of their respective parishes. No York clergy visitation returns are extant for any date between 1764 and 1865, and hence the set for the latter year is a particularly significant historical source. This excellent edition is therefore to be warmly welcomed.

The printed text of the 638 returns, covering all but a handful of the parishes in the diocese, runs to over 500 pages. It is preceded by a substantial introduction which sets the document in its context and summarizes some of the key insights it provides into the changing fortunes of the Church of England in the mid-Victorian period. The returns themselves are conscientiously edited with extensive notes, which provide basic biographical information on the clergy themselves.

As the introduction cogently demonstrates, these initially somewhat unprepossessing documents will repay close study. Obviously some respondents were more informative than others, but taken as a whole the returns serve as a compelling reminder of the almost infinite variety of local experience, shaped by the permutations of geography and religious history, and the location, size, layout and furnishing of the churches themselves. The personalities of key figures, including churchwardens, curates, patrons and major landowners and employers, as well as incumbents, could also have a profound impact on parish life. Some clergy were evidently energetic and imaginative individuals; others due to indolence, poverty, age or poor health, were perfunctory in the discharge of their duties.

There is material here to challenge many simplistic generalizations about Victorian religion. For example, in some parishes the church was successfully challenging the erstwhile dominance of Methodism. On the other hand, the Anglican idyll of a close-knit rural community controlled by a partnership of squire and parson was often elusive in practice, if the squire was non-resident, uninterested, or, as at Hovingham in this period, locked in disputes and rivalries with the incumbent. A number of clergy expressed themselves forcefully on the lax sexual morality of their parishioners, indicating that in the countryside as in the towns 'Christian' standards were honoured as much in the breach as in the observance.

In making the returns accessible in printed form Royle and Larsen have thus provided a rich resource both for local historians, giving extensive insights into the specifics of life in particular communities, and for historians of religion at a regional and national level, whose generalizations continually need to be tested against the realities of experience at the grass roots.

The Open University John Wolffe

DENBY & DISTRICT, IV: CHRONICLES OF CLERICS, CONVICTS, CORN MILLERS AND COMEDIANS. By CHRIS HEATH. Barnsley, Wharncliffe Books, 2009. Pp. 192. Price (paperback) £12.99. ISBN: 9781845631246.

Over the past fifteen years local historian, Chris Heath, has excavated and published a prodigious amount of information about the Denby area between Barnsley and Huddersfield. Volume I, *From Prehistory to the Present* (1997, revised 2001) was organised as a 'logical, cohesive and accessible narrative', focussed mainly on Upper and Lower Denby. Volume II, *From Landed Lords to Inspired Industrialists* (2004), announced itself as a 'companion', based on new material but still largely chronological, and with a greater emphasis on Denby Dale. Volume III, *From Medieval Manuscripts to Modern Memories* (2006) offered mainly 'chronicles', that is, verbatim chronologies from primary sources, plus some family history and a further extension of range to Skelmanthorpe and Cumberworth. This new book, volume IV in the series, continues the progression, presenting six disparate pieces more like a volume in Wharncliffe's *Aspects* series, albeit by a single author.

Of greatest interest to somebody not steeped in the history of Denby and district are chapters on a transported house-breaker and a family of travelling music-hall artistes; in these, Heath allows himself to write vivid social history grounded in case studies. But even these are interrupted by excessive detail (for example a three-page list of names of all the convicts who shared Elijah Hinchcliffe's voyage), and elsewhere Heath's encyclopaedic tendencies run riot, with an exhaustive catalogue of Denby clergy, more 'chronicles' from the *Barnsley Chronicle*, and an extended footnote to the previous volumes' coverage of the manorial descent.

Introducing volume III, the author conceded that 'Ideally much of this book would have worked far better had I used the information in volumes I and II, but it is easy to use hindsight.' If he is tempted to essay a volume V, he should consider producing a synoptic narrative which is more than the sum of the parts. Failing that, he has provided a treasury of information for anybody else who wishes to take up the challenge.

Huddersfield David Griffiths

A PLACE BY THE SEA. EXCAVATIONS AT SEWERBY COTTAGE FARM, BRIDLINGTON. By C. Fenton-Thomas. On-Site Archaeology Monograph No1 2009.ISBN 978-0-9561965-0-7

This impressive volume documents the results of rescue excavations carried out between 1999 and 2004 in advance of a 16ha residential housing development. Archaeological remains span the Neolithic to the Anglo-Saxon period including an area of Roman activity represented by buildings, corn driers and field boundaries. Almost two-thirds of the book, however, deals with the Neolithic material.

The volume starts with an introduction to the project and the position and location of the trenches and 'zones'. There then follows a series of 3 subdivided chapters dealing with the Neolithic, Iron Age and Roman and post-Roman archaeology respectively. Chapter 5 deals with the environmental and Radiocarbon data and the whole is concluded in chapter 6.

The Neolithic occupation of the site is, at the same time, extensive and ephemoral in keeping with the vast majority of evidence for Neolithic settlement elsewhere in Britain. Pits, hollows and feature clusters are augmented by more regular posthole arrangements including a trapezoidal posthole-defined structure (D2) and a sequence of buildings located in a hollow in area A. The occupation does not appear to have been continuous but rather represented a number of occupation episodes spanning some 500 years and broadly associated with midden deposits. The stratigraphy and phasing of the Neolithic elements, particularly in Area A, is complex and is not always easy to follow but interpretation is aided by a large number of well-produced shaded plans. The phasing can be broken down into two main periods, the middle Neolithic represented by Peterborough Ware vessels and a later Neolithic represented by Grooved Ware. This is supported by the radiocarbon dates spanning almost a millennium from 3600-2500 BC. Indeed it is the comprehensive nature of the radiocarbon dating that has allowed some residuality problems to be identified in Chapter 5. The pits, trapezoidal structure and oval structure have also provided a rich artefactual assemblage of lithics and ceramics which are excellently described and illustrated, The ceramics in particular augment the already rich assemblages from the Great Wold Valley lipid analysis of the assemblage has again highlighted the importance of dairying amongst Neolithic populations.

In the Iron Age and Roman-British periods, we are dealing with a formally divided landscape with a square and round barrow (the former with an associated mortuary enclosure), areas of industrial activity, structural evidence and structures for crop drying. These span the 1st C BC to the 3rd C AD with the earlier part of the period represented by ephemeral structures and the burial monuments. Once again annotated photographs and clearly shaded and labelled plans illustrate the phasing within this period. The Roman-British period is associated with the field systems and the excellently preserved crop driers.

The Post-Roman archaeology comprises a small number of pits and postholes producing Saxon pottery.

The discussion chapter, at just under 2 pages is a bit of an anticlimax. To be fair, there are extensive concluding remarks at the end of each of the period chapters that examine the wider implications of the site at various periods and which also place the site in its landscape settings, however one wonders if this rather underplays this important and complex site. In this reviewer's opinion such a strategy seems to make this seem like three small monographs bound together rather than rendering the report a unified whole. This however is wholly personal. It does not detract from the importance of this site to Neolithic studies in particular and the author and contributors are to be congratulated for presenting these results in such a clear and timely way.

University of Bradford

Alex Gibson

THE IRON AGE IN EAST YORKSHIRE: AN ANALYSIS OF THE LATER PREHISTORIC MONUMENTS OF THE YORKSHIRE WOLDS AND THE CULTURE WHICH MARKED THEIR FINAL PHASE. By John Dent (2010) British Archaeological Reports British Series 508. Oxford: John and Erica Hedges Ltd. 123 B/W illustrations; 10 tables; 138 pages. ISBN 9781407304755

Nearly thirty years ago, in a series of influential papers, John Dent introduced us to the wonders of the multi-period remains at Wetwang Slack (Dent 1982; 1983a; 1983b; 1985). He brought to life the roundhouses, square barrows and boundary ditches by placing them in their landscape context amidst the social transformations of the late first millennium BC. It is fair to say that Dent's work on Wetwang-Garton Slack, along with that of Tony Brewster before him, inspired a whole generation of researchers. Given this legacy, it is disappointing that this book-length study does not succeed in developing or updating the earlier discussions.

The analysis focuses on two rich archaeological areas on the eastern edge of the Wolds, to the north and west of Driffield. The first is centred on the village of Rudston whilst the second is based on Wetwang Slack itself. The study falls into two halves. In the first, *Site Analysis*, Dent uses the RCHM(E) (now English Heritage) cropmark plots (Stoertz 1997) to carry out a morphological analysis of sites identified from aerial photographs. Although he suggests that many cropmark features could potentially be Iron Age in date, we should never forget that most of them are neither excavated nor dated. Dent tries to make sense of the thousands of sites known from cropmarks by studying sample areas of 1 sq km, one from each 10 sq km map sheet, from all over the Wolds. This is then related to a larger study area, measuring 10km by 10km, around the village of Rudston. Much of the discussion of landscape development is derived from the detailed Rudston study rather than the small sample areas. In the second half, *Material Culture*, he presents and discusses some of the excavated material from Wetwang Slack and other sites. This section includes useful discussions of artefacts, roundhouse architecture, burial rites and cemetery development. The latter, inevitably, owes a lot to the work of Ian Stead, who is fully acknowledged. It is concluded with an overall discussion, which brings together the results of the two studies. The volume finishes with an appendix, presenting the raw data of the cropmark analysis.

In many ways this book is in a time warp. Dent first wrote the text for a PhD thesis that was submitted in 1995, some fifteen years ago. Despite the large amount of relevant research published since that time, his thesis is presented here almost entirely unaltered. It was hard to identify a coherent thread or overall aim that ran through the entire volume and it was rare that the results of the two halves, *Site Analysis* and *Material Culture*, were brought together in a meaningful way. This reader also found it difficult to move between the textual discussion and the figures. It was not always easy to locate the features or areas being discussed on the relevant illustration.

There were some ideas and themes that struck a chord. Although the study is about the later first millennium BC, Dent also considers earlier periods and stresses the presence of monuments from the Neolithic and Bronze Age in the Iron Age landscape. It is easy to forget, in a period-based study that, a) the Iron Age communities held many generations of social memory and, b) that the landscape was full of visible and perplexing ancient monuments. In asking why certain localities, such as the Woldgate ridge, south of Rudston, contain concentrations of monuments and pit groups from the fourth millennium BC all the way to the first, he favours the explanation that certain places were always seen as 'special' because they had wide views and were close to long distance tracks across the Wolds. This long-term perspective is also apparent when Dent discusses a change in *'ritual emphasis'* from the Rudston area in the Neolithic and Bronze Age to the headwaters of the River Hull, in the late prehistoric and early medieval periods. Broad long-term patterns such as these are rarely addressed in archaeological literature and I would have enjoyed reading more on this, if these ideas had been developed.

The interpretations of the agricultural landscapes were often unconvincing. For the Rudston study area, Dent proposes a model where an *'arable core'* was surrounded by pasture. This changed during the second half of the first millennium BC when new settlements, represented in the cropmark landscapes by *'droveway settlements'* (also known as ladder settlements), were established on the edge of the *'arable core'*. The evidence for some areas to have been arable, and others pasture, is not obvious and, without sufficient explanation, it is hard to find this land-use model convincing. In a number of cases the late Iron Age *'droveway settlements'* are compared with medieval villages, simply because they look like them, in two dimensions on a plan. The same approach is taken when he suggests that Iron Age arable fields were worked in common because, like medieval open fields, they do not contain internal divisions between plots. These interpretations would have benefited from comparison with recent Iron Age landscape research elsewhere in the UK. Instead, Dent relies on a 'common-sense' attitude to settlement and farming, where local soils and climate seem to be more important than the social or economic conditions of the communities under study.

An even greater omission, however, is the complete failure to acknowledge the large body of published work on the East Yorkshire Iron Age, which has appeared since the mid 1990s. The work of Bill Bevan (1997;1999), Melanie Giles (2000;2007a;2007b), Mike Parker Pearson (1999) and myself (Fenton-Thomas 2003;2005;2008) is never discussed. In the acknowledgements, there is some mention of a group of postgraduate researchers who carried out work after the initial submission of the thesis. However, he writes that, *'I am not sufficiently persuaded by such new data as has appeared in the last fifteen years as to alter my original text.'* It is surely preferable to challenge other ideas by addressing them head on in print, rather than simply to ignore them.

Chris Fenton-Thomas

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SHORT NOTICES

HUDDERSFIELD IN THE 1820s. By EDWARD J. LAW. Pp.68 with illustrations and folding maps. Huddersfield Local History Society, 2009. Price £6.00. ISBN 978-0-950913-4-5-2.

This booklet takes the form of a walking tour of Huddersfield in the 1820s and is built around two sources: a map of the town in 1820 by Charles Bradley, deposited in Kirklees Archives in 2007 and previously better-known from W. H. Cook's inferior copy of 1903 (both reproduced here); and D. Schofield's reminiscences of the town in 1825-6, published in the *Huddersfield Examiner* in 1883. Armed with the map, guided by Schofield and informed by further archival research, Mr Law takes his reader on six walks through the town, noting what is long gone, observing what can still be seen, and retailing anecdotes about places on the way. Five further chapters then take a more thematic approach to buildings, amenities and aspects of local government at the time of the map. The work is pocket-sized and should be of interest to local historians of the area.

MALTON, OLD MALTON AND NORTON THROUGH TIME. By JOHN T. STONE. Pp.96, illustrated. Stroud: Amberley Publishing, 2009. Price £12.99. ISBN 978-1-84868-518-5.

This booklet presents the changing townscape of Malton through the medium of over 180 photographs. Each page comprises an old sepia print of some part of Malton, Old Malton or Norton and a modern colour photograph taken as nearly as possible from the same angle, together with a short paragraph of explanatory text. Those who know the town will enjoy spotting the differences and local historians should be stimulated into attempting to explain at least some of them.

PIONEERS OF PARTISANS? GOVERNING HUDDERSFIELD 1820–1848. By DAVID GRIFFITHS. Pp.72 with six illustrations and two maps. Huddersfield Local History Society, 2008. ISBN 978-0-9509-1344-5. £5.00.

This publication provides an exemplary study of local government in a rapidly expanding industrial town which was not incorporated until 1868, and examines the competing roles of manorial, township and statutory bodies. Despite being established only in 1820, the Commission for Lighting, Watching and Cleansing the Town (CLWC), was in some ways less progressive than the township vestry which, with its democratically elected members and use of pioneering professional servants, was able to set the pace for improvement, cleansing the streets and pressing for the Improvement Act which in 1848 eventually brought a more unified approach to local government. The greatest achievement of the unelected CLWC was the provision of gas lighting (by a gas company on which a number of Commissioners were directors). This publication should be welcomed not only by historians of Huddersfield but by all local historians seeking to disentangle and reassess the complex network of institutions and personalities which tackled with varying degrees of success the problems of urban living conditions in the first half of the nineteenth century.

All communications about the editorial side of the Journal should be addressed to the Archaeology editor, Ian Sanderson, WYAAS, Newstead Road, Wakefield, WF1 2DE, email isanderson@wyjs.org.uk or to the History editor, Edward Royle, 77 Heworth Green, York YO31 7TL. Tel: 01904 423009, email royle77@talktalk.net.
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